

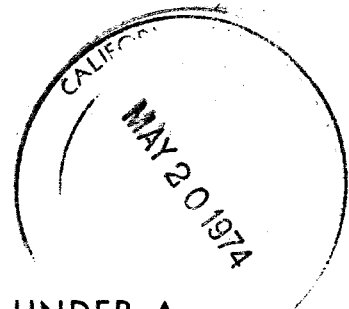
CALIFORNIA INSTITUTE OF TECHNOLOGY

EARTHQUAKE ENGINEERING RESEARCH LABORATORY

ANALYSES OF
STRONG MOTION EARTHQUAKE ACCELEROGRAMS

VOLUME III - RESPONSE SPECTRA
PART G - ACCELEROGRAMS IIG106 THROUGH IIG114

REPORT NO. EERL 73-85



A REPORT ON RESEARCH CONDUCTED UNDER A
GRANT FROM THE NATIONAL SCIENCE FOUNDATION

PASADENA, CALIFORNIA

DECEMBER 1973

CALIFORNIA INSTITUTE OF TECHNOLOGY
EARTHQUAKE ENGINEERING RESEARCH LABORATORY

ANALYSES OF
STRONG MOTION EARTHQUAKE ACCELEROGRAMS

Volume III - Response Spectra
Part G - Accelerograms IIG106 through IIG114

Report No. EERL 73-85

A Report on Research Conducted Under a Grant from
the National Science Foundation

Pasadena, California
December, 1973

ABSTRACT

This is one of a series of reports presenting earthquake response spectrum curves calculated from corrected ground accelerograms. In the preface to the first part, Volume III, Part A, Report No. EERL 72-80, there is a summary of response spectrum techniques in earthquake engineering which is available as background material for users of the data. For each earthquake accelerogram, two spectrum plots are given — relative velocity response versus period on a linear scale, and a tripartite log-log plot giving relative displacement, pseudo-velocity, and pseudo-acceleration spectra. The Fourier spectrum is also shown on the linear plot. Digital print-outs of ordinates of the plotted curves are tabulated for each earthquake. The records analyzed in this report, Volume III, Part G, are the corrected accelerogram records of Volume II, Part G, Report No. EERL 73-52, and appeared in their uncorrected form in Volume I, Part G, Report No. EERL 72-20.

TABLE OF CONTENTS

	<u>Page</u>
Preface to Volume III, Part G	1
Notes on the Volume III Series	2
Index of Earthquake Records in Volume III, Part G	9
Earthquake Data	10
Plots and Print-Outs of Response Spectra for Accelerograms IIG106 through IIG114	14
List of EERL Reports Available from NTIS	122

PREFACE TO VOLUME III, PART G

This report, Volume III, Part G, Report No. EERL 73-85, is part of the Volume III series presenting earthquake response spectrum curves calculated from corrected accelerograms. We continue here with records from the San Fernando, California, earthquake of February 9, 1971. The analysis of records from this earthquake appeared first in Volume III, Part C, Report No. EERL 73-81, and this continuation includes the analysis of records from the following locations:

1. Caltech Seismological Laboratory, Pasadena
2. Caltech Athenaeum, Pasadena
3. Caltech Millikan Library, Pasadena (2 records)
4. Caltech Jet Propulsion Laboratory, Pasadena (2 records)
5. 611 West 6th Street, Los Angeles (2 records)
6. Palmdale Fire Station, Palmdale

The uncorrected versions of these records appeared in Volume I, Part G, Report No. EERL 72-20, and the corrected accelerations, velocities, and displacements were included in Volume II, Part G, Report No. EERL 73-52. The Volume II corrections included a long period cut-off of 8 seconds for the 70-mm film records in this part instead of the standard cut-off period of approximately 15 seconds. The results published here reflect this altered frequency band. Several comments applying to every report of the Volume III series of response spectra are included in the next section.

NOTES ON THE VOLUME III SERIES

The following includes some general background information describing the Volume III series.

The series of reports in Volume I present "uncorrected" digitized and plotted strong-motion earthquake accelerograph data, while the series in Volume II present corrected digitized data prepared so that the maximum information over the widest practicable frequency range would be available. The corrections include long period filtering ensuring to the greatest extent possible a uniform type of baseline adjustment and an instrument correction to account for the high frequency response characteristics of the accelerograph transducer.

The Volume III series presents earthquake response spectrum curves calculated from the corrected accelerograms of Volume II. A brief introduction to response spectrum techniques as they are commonly applied in the earthquake engineering field appeared in Volume III, Part A, Report No. 72-80, and this may be referred to by those users who need more explanatory remarks than appear in the following.

Contents of the Various Parts. Part A of Volume III contained the response spectra analysis for the corrected records of Volume II, Part A, Report No. EERL 71-50. In turn, the "uncorrected" versions of these records appeared in Part A of Volume I. This arrangement has been maintained in all subsequent parts. In Part C of Volume III, Report No. EERL 73-81, we began the presentation of response spectra analysis for the unusually important series of accelerograms obtained during the San Fernando earthquake of February 9, 1971.

Component Directions. A description of the component direction nomenclature for the records was given in Volume II, Part B, Report No. EERL 72-50. Consistent with this, the component direction where it appears in this report refers to the direction of the transducer pendulum motion for the trace to be deflected "up" on the record when viewed in the normal way with time increasing from left to right. The direction of true ground acceleration is opposite to this pendulum motion. The spectral calculations of Volume III are concerned with absolute values of the response and the particular component sense in this report is thus immaterial.

Assessment of Long Period Errors. A separate section in Volume II, Part G, Report No. EERL 73-52, entitled "Current Assessment of Long Period Errors" describes the results of a recent investigation of long period displacements calculated from recorded accelerations. During the course of this study it became evident that the procedures for preparation of 70-mm and, to a lesser extent, 35-mm film records from the San Fernando earthquake of February 9, 1971, introduced spurious excitations at periods close to the duration of the sectional enlargements. These effects have been removed from all of the 70- and 35-mm film records by filtering with a long period limit of 8 seconds rather than the standard cut-off period of 16 seconds in the Volume II correction procedure. The following list of Caltech reference numbers indicates the records from the San Fernando earthquake included in Volume I, Parts C through S, that have been processed with the cut-off period of 8 seconds:

Parts G, H, I, K, N, Q, R, S: All records in these parts.

Part J: Records J142, J145 through J150.

Part L: Records L166, L167, L168; L172 through L175.

Part M: Records M176, M177, M178; M180 through M184.

Part O: Records O198 through O201; O206, O208, O210.

Part P: Records P231 and P232.

A decision was also made at the same time to eliminate a number of very low amplitude accelerograms from further processing (Volume II and on), reflecting the expectation that the resulting displacement records will be dominated by noise. Their Caltech reference numbers are as follows:

H127; I140; J151, J152; K153 through K156; K161 through K165; O202, O203, O209, O211, O212; P224 through P230.

Description of the Figures and Tables. For each component in the following pages there are two figures showing response spectra and two pages of tables containing most of the spectral ordinates. These are described in detail in the following.

The first plot is that of the true relative velocity response spectrum, SV. The name of the earthquake, the instrument location, and the damping values appear in the descriptive titles. The first title gives the name, date, and time of occurrence of the earthquake; the second is comprised of two labels, the instrument location or observation station and the particular component. The first identification label, for example IIIA001, indicates that this analysis appears in Volume III, Part A, that the processed record belongs to Volume II, Part A, containing corrected data, and that this record is the first of

the complete series. This record's uncorrected data appear in Volume I, Part A, and its Fourier spectra in Volume IV, Part A. The second identification label is a record label (for instance 40.001.0), a string of three numbers separated by periods. The first number gives the year in which the earthquake appeared, the second is the serial number of the record as it was received at the Earthquake Engineering Research Laboratory, and the third indicates whether it was a main event or an aftershock, sequentially numbered, the main event starting with zero.

The five continuous line plots correspond to damping values of 0, 2, 5, 10, and 20 percent of critical, and these curves will usually be easily distinguishable, with the zero damped curve having the greatest ordinates. The dashed curve on this plot is the Fourier amplitude spectrum, FS, calculated at the same periods as for the relative velocity response spectra. The ordinates for the spectra are in units of in/sec, in accordance with past engineering practice, while the scale is chosen to fill the available space. The periods extend to 15 seconds, close to the long period cut-off point in the corrected data of Volume II, but the axis is divided into two linear portions. From 0 to 3 seconds takes up three-quarters of the axis, and from 3 to 15 seconds takes up the remainder.

The second plot is that of the pseudo velocity response spectrum, PSV, together with the relative displacement spectrum, SD, and the pseudo acceleration spectrum, PSA, in the tripartite logarithmic plot versus period. This convenient plot is made possible by the relationships between PSV, SD, and PSA detailed in Volume III, Part A, Report No. EERL 72-80. The units are, once again, the convenient engineering

units of in/sec, in, and g, respectively. The descriptive titles are the same as on the true relative velocity spectrum.

The two pages of tables contain values of the ordinates for the previous plots. After the titles there are arranged, in columns, the periods (PER), Fourier amplitude spectrum (FS), and then sets of four columns containing SD, SV, SA, and PSV for all of the five damping values. The units are indicated and each value is followed by a multiplicative power of 10, e.g., 432-1 represents a value of 43.2.

The ordinates are also stored on computer cards containing the Fourier amplitude spectrum and, for all of the five damping values, the pseudo velocity and relative velocity response spectra. A simplified economic format, 13F6.3, is made possible by using the logarithms of these spectra. The last two columns are for identification purposes. These cards are available on request from the National Information Service for Earthquake Engineering at the California Institute of Technology.

Inclusion of Spectra of Upper Story Records. The earthquake response spectrum was originally introduced as a means of characterizing the response of structures to the exciting ground motion, and hence such spectra are usually calculated from ground motions themselves. There are many instances, however, in which a structural motion is the excitation, for example, of mechanical equipment or other objects attached at upper story locations in buildings. In such cases it may be useful to calculate a response spectrum based on an acceleration-time function which is in itself a response to the earthquake ground motion. Such response spectra of structural motions will

ordinarily contain predominant peaks corresponding to structural frequencies and will consequently appear very different from ground spectra.

A number of accelerograms have been obtained from instruments located in upper floors of buildings, and it has been decided to include response spectra computed from these structural responses in the same form as the ground spectra. Such building spectra will be useful in estimating the response of equipment and contents to building motions excited by earthquakes. The reader is cautioned to keep this point in mind and to avoid such building spectra when studying the characteristics of the ground motion itself.

Acknowledgments. The cooperative efforts of many people are essential in the preparation of a series of reports of this kind and we have been fortunate in the quality of staff that has carried out the various details with special care and attention. We should like to express our appreciation to Mr. Vincent Lee for his assistance with many details of computer programming, to Miss Barbara Turner and Miss Sharon Vedrode for the care taken with typing and editing, to the staff of the Willis H. Booth Computing Center for their continued help with all aspects of the computing process, and to the staff of the Caltech Graphic Arts Facilities for very efficient work on publication details. The whole project has been made possible by the continued support of the National Science Foundation, supplemented

in an important way by contributions from the Earthquake Research
Affiliates Program of the California Institute of Technology.

M. D. Trifunac
A. G. Brady
D. E. Hudson
Earthquake Engineering Research Laboratory
California Institute of Technology

INDEX OF EARTHQUAKE RECORDS IN
VOLUME III, PART G

	<u>Page</u>
San Fernando Earthquake, February 9, 1971 - 0600 PST	
IIIG106; Caltech Seismological Lab., Pasadena, Calif.; South, West, Down	14
IIIG107; Caltech Athenaeum, Pasadena, Calif.; North, East, Down	26
IIIG108; Caltech Millikan Library, Basement, Pasadena, Calif.; North, East, Down	38
IIIG109; Caltech Millikan Library, 10th Floor, Pasadena, Calif.; North, East, Down	50
IIIG110; Jet Propulsion Lab., Basement, Pasadena, Calif.; S82E, S08W, Down	62
IIIG111; Jet Propulsion Lab., 9th Floor, Pasadena, Calif.; S82E, S08W, Down	74
IIIG112; 611 W. Sixth St., Basement, Los Angeles, Calif.; N52W, N38E, Down	86
IIIG113; 611 W. Sixth St., 42nd Floor, Los Angeles, Calif.; N38E, N52W, Down	98
IIIG114; Palmdale Fire Station, Storage Room, Palmdale, Calif.; S60E, S30W, Down	110

EARTHQUAKE DATA

The San Fernando, California, Earthquake of February 9, 1971,
0600 PST; epicenter, $34^{\circ}24.0'N$, $118^{\circ}23.7'W$; maximum intensity, XI;
revised magnitude (M_L), 6.4; depth, 13.0 km.

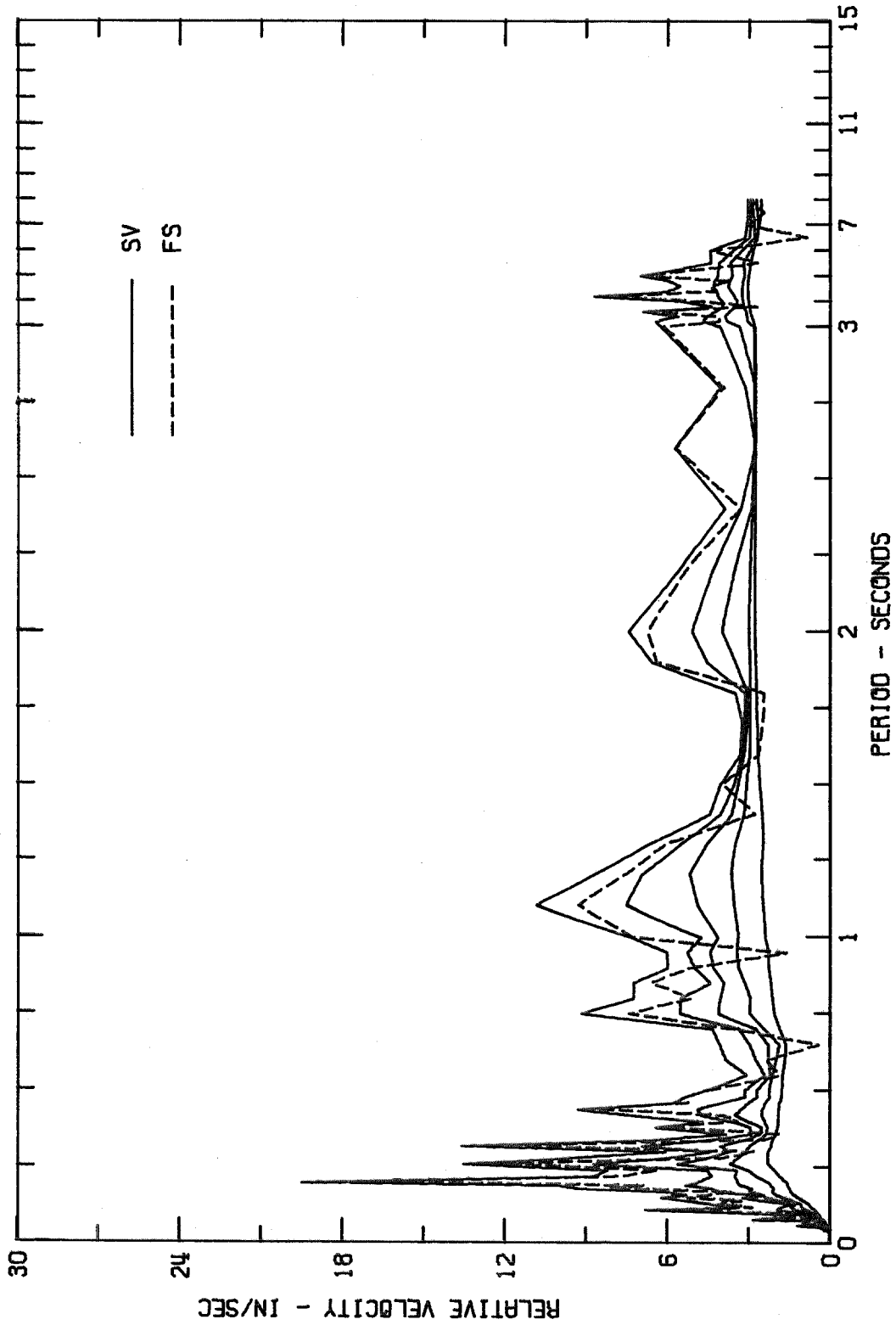
REFERENCES (See additional list, page 122)

- (April-May, 1971). "The San Fernando Earthquake," California Geology, v. 24, n. 4-5.
 - (November, 1971). "Report of the Los Angeles County Earthquake Commission, San Fernando Earthquake, February 9, 1971," prepared for the Los Angeles Board of Supervisors.
 - "The San Fernando Earthquake of February 9, 1971," National Academy of Sciences, Washington, D.C.
- Barrows, A. G., et al (1971). "Map of Surface Breaks Resulting from the San Fernando, California, Earthquake of February 9, 1971," California Division of Mines and Geology.
- Bolt, B. A. (August, 1972). "San Fernando Rupture Mechanism and the Pacoima Strong-Motion Record," Bull. Seism. Soc. Am., v. 62, n. 4, 1053-1061.
- Boore, D. M. (October, 1973). "The Effect of Simple Topography on Seismic Waves: Implications for the Accelerations Recorded at Pacoima Dam, San Fernando Valley, California," Bull. Seism. Soc. Am., v. 63, n. 5, 1603-1609.
- Canitez, N. and M. N. Toksöz (May, 1972). "Static and Dynamic Study of Earthquake Source Mechanism: San Fernando Earthquake," Journal of Geophysical Research, v. 77, n. 14, 2583-2594.
- Division of Geological and Planetary Sciences, California Institute of Technology (April, 1971). "Preliminary Seismological and Geological Studies of the San Fernando, California, Earthquake of February 9, 1971," Bull. Seism. Soc. Am., v. 61, n. 2, 491-495.
- Hanks, T. C. (February, 1974). "The Faulting Mechanism of the San Fernando, California, Earthquake," J. Geophys. Res., v. 79, In Press.
- Housner, G. W. and P. C. Jennings (July-September, 1972). "The San Fernando California Earthquake," Earthquake Engineering and Structural Dynamics, The Journal of the International Association for Earthquake Engineering, v. 1, n. 1, 5-31.
- Hudson, D. E. (December, 1972). "Local Distribution of Strong Earthquake Ground Motions," Bull. Seism. Soc. Am., v. 62, n. 6, 1765-1786.
- Mikumo, T. (1973). "Faulting Process of the San Fernando Earthquake of February 9, 1971 Inferred from Static and Dynamic Near-Field Displacements," Bull. Seism. Soc. Am., v. 63, n. 1, 249-269.

- Perez, V. (1973). "Velocity Response Envelope Spectrum as a Function of Time, for the Pacoima Dam, San Fernando Earthquake, February 9, 1971," Bull. Seism. Soc. Am., v. 63, n. 1, 299-313.
- Proctor, R. J., R. Crook, Jr., M. H. McKeown, and R. L. Moresco (June, 1972). "Relation of Known Faults to Surface Ruptures, 1971 San Fernando Earthquake, Southern California," Bull. Geol. Soc. Am., v. 83, 1601-1618.
- Scott, R. F. (October, 1973). "The Calculation of Horizontal Accelerations from Seismoscope Records," Bull. Seism. Soc. Am., v. 63, n. 5, 1637-1661.
- Steinbrugge, K. V., et al (August, 1971). "The San Fernando Earthquake, February 9, 1971," Pacific Fire Rating Bureau, 465 California Street, San Francisco, California.
- Trifunac, M. D. (June, 1972). "Stress Estimates for the San Fernando, California, Earthquake of February 9, 1971: Main Event and Thirteen Aftershocks," Bull. Seism. Soc. Am., v. 62, n. 3, 721-750.
- Trifunac, M. D. and D. E. Hudson (October, 1971). "Analysis of the Pacoima Dam Accelerogram," Bull. Seism. Soc. Am., v. 61, n. 5, 1393-1411.
- Trifunac, M. D. (February, 1974). "A Three-Dimensional Dislocation Model for the San Fernando, California, Earthquake of February 9, 1971," Bull. Seism. Soc. Am., v. 64, n. 1, In Press.
- U.S. Department of Commerce (March, 1971). "The San Fernando, California, Earthquake of February 9, 1971," National Bureau of Standards Report 10556.
- U.S. Department of Commerce (December, 1971). "Engineering Aspects of the 1971 San Fernando Earthquake," Building Science Series 40, National Bureau of Standards.
- U.S. Geological Survey and the National Oceanic and Atmospheric Administration. "The San Fernando, California, Earthquake of February 9, 1971," Geological Survey Professional Paper 733, (preliminary report).

Page 13 is blank.

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
1111G106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP SOOW
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

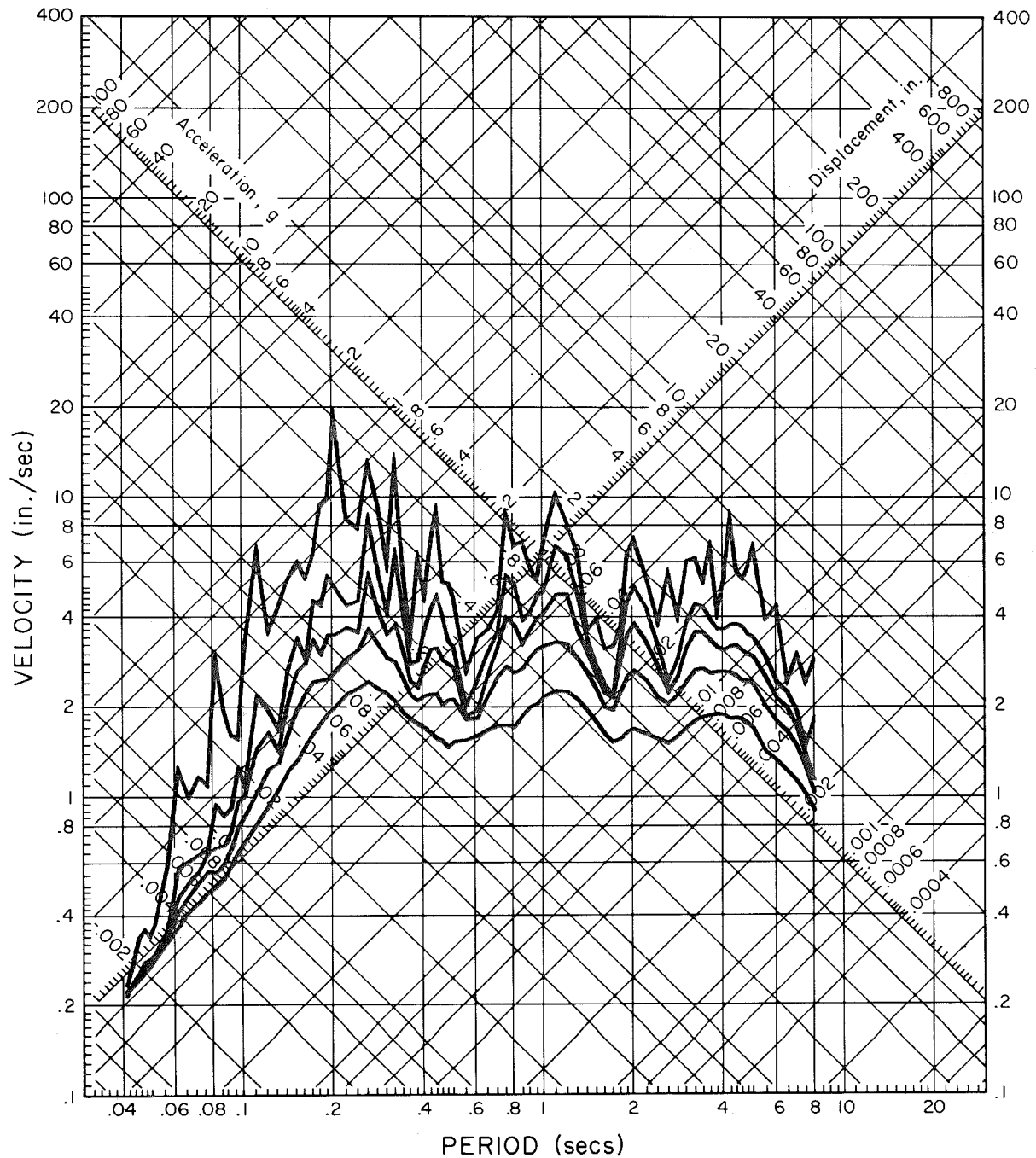


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP 500H

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIG106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP SOOW

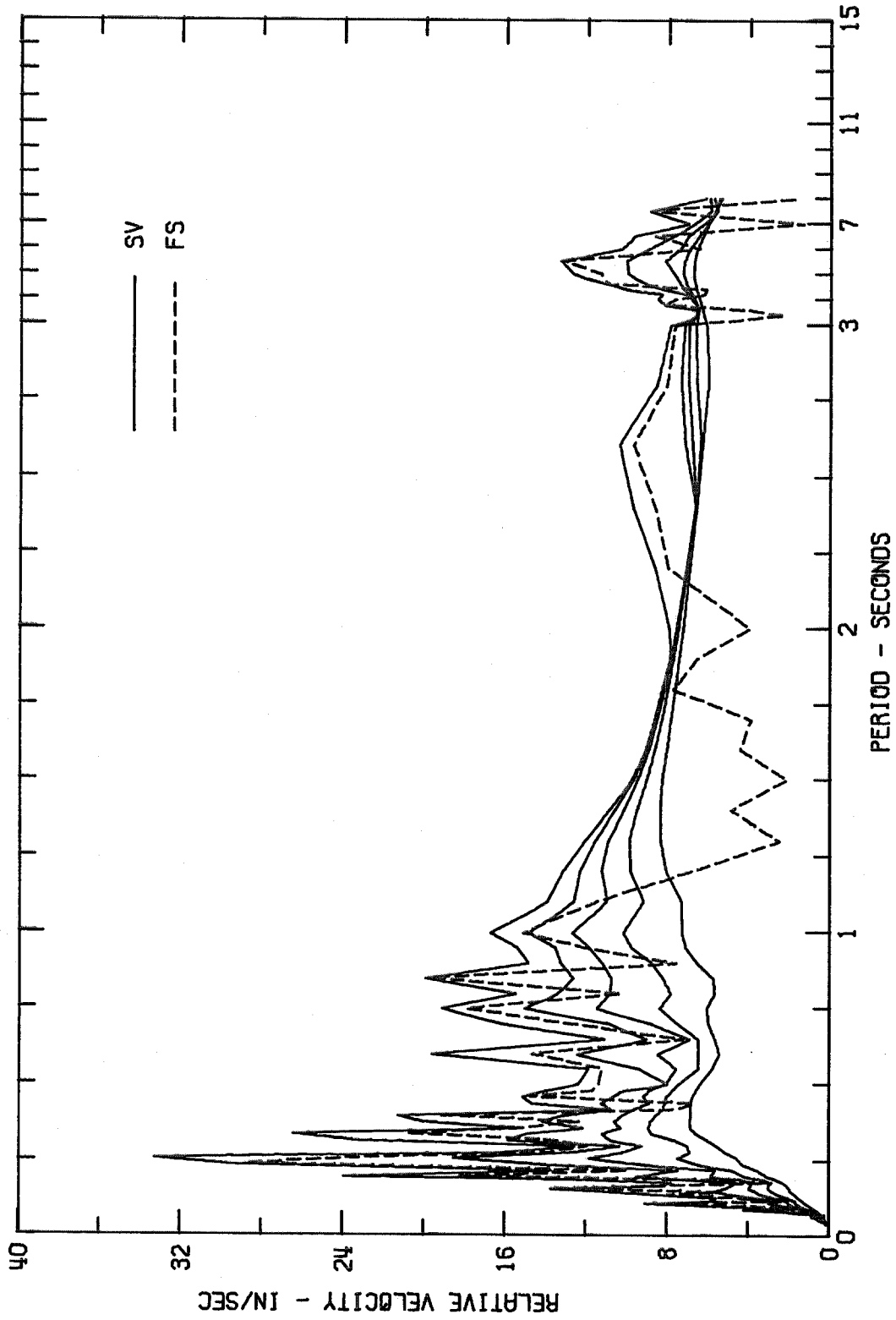
THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	482-4	153-5	110-3	983-4	241-3	141-5	755-4	902-4	221-3	145-5	654-4	926-4	227-3	146-5	606-4	937-4	230-3
0.042	110-3	189-5	127-3	110-3	284-3	166-5	681-4	962-4	248-3	163-5	691-4	947-4	245-3	163-5	662-4	947-4	244-3
0.044	128-3	243-5	210-3	128-3	348-3	184-5	749-4	978-4	264-3	184-5	739-4	971-4	262-3	181-5	717-4	960-4	259-3
0.046	840-5	272-5	154-3	131-3	372-3	211-5	850-4	102-3	288-3	204-5	792-4	991-4	279-4	200-5	785-4	971-4	273-3
0.048	665-4	269-5	156-3	119-3	352-3	225-5	909-4	100-3	295-3	222-5	880-4	990-4	291-3	218-5	869-4	977-4	286-3
0.050	683-4	312-5	189-3	127-3	392-3	246-5	103-3	100-3	309-3	242-5	966-4	993-4	305-3	239-5	962-4	990-4	300-3
0.055	137-3	532-5	462-3	180-3	608-3	326-5	183-3	110-3	372-3	318-5	150-3	107-3	364-3	311-5	133-3	106-3	356-3
0.060	109-2	122-4	124-2	348-3	128-2	573-5	354-3	162-3	600-3	458-5	230-3	129-3	480-3	412-5	171-3	117-3	431-3
0.065	548-3	106-4	867-3	258-3	103-2	651-5	367-3	157-3	630-3	555-5	282-3	135-3	536-3	502-5	223-3	123-3	485-3
0.070	787-3	134-4	100-2	281-3	121-2	738-5	466-3	154-3	663-3	648-5	330-3	136-3	582-3	594-5	271-3	126-3	533-3
0.075	931-3	135-4	100-2	245-3	113-2	819-5	512-3	148-3	686-3	798-5	432-3	144-3	669-3	694-5	329-3	125-3	581-3
0.080	273-2	382-4	290-2	611-3	300-2	123-4	856-3	197-3	971-3	892-5	551-3	142-3	700-3	734-5	403-3	120-3	576-3
0.085	178-2	273-4	194-2	387-3	202-2	120-4	815-3	171-3	894-3	962-5	607-3	138-3	711-3	835-5	480-3	118-3	617-3
0.090	396-3	239-4	140-2	302-3	167-2	137-4	767-3	172-3	956-3	114-4	650-3	145-3	799-3	100-4	538-3	128-3	699-3
0.095	114-2	245-4	150-2	277-3	162-2	195-4	103-2	221-3	129-2	150-4	720-3	169-3	996-3	124-4	588-3	140-3	820-3
0.100	157-2	521-4	286-2	533-3	327-2	178-4	852-3	181-3	111-2	165-4	721-3	169-3	103-2	142-4	624-3	146-3	895-3
0.110	610-2	121-3	686-2	102-2	691-2	334-4	200-2	333-3	225-2	264-4	130-2	225-3	151-2	188-4	908-3	165-3	107-2
0.120	285-2	705-4	351-2	500-3	369-2	384-4	186-2	275-3	201-2	324-4	144-2	231-3	169-2	244-4	106-2	178-3	128-2
0.130	417-2	928-4	443-2	561-3	448-2	359-4	139-2	218-3	173-2	304-4	130-2	186-3	147-2	278-4	109-2	170-3	134-2
0.140	324-2	125-3	530-2	654-2	563-2	616-4	245-2	319-3	276-2	476-4	184-2	248-3	213-2	373-4	140-2	200-3	167-2
0.150	530-2	150-3	625-2	685-3	631-2	835-4	326-2	381-3	350-2	651-4	241-2	300-3	272-2	484-4	176-2	223-3	203-2
0.160	442-2	142-3	530-2	567-3	558-2	754-4	245-2	301-3	296-2	737-4	248-2	295-3	289-2	586-4	199-2	236-3	230-2
0.170	364-2	180-3	610-2	638-3	666-2	126-3	414-2	448-3	467-2	934-4	299-2	329-3	345-2	678-4	214-2	241-3	250-2
0.180	812-2	280-3	942-2	885-3	979-2	129-3	443-2	411-3	452-2	892-4	288-2	280-3	311-2	726-4	207-2	220-3	253-2
0.190	689-2	311-3	100-1	882-3	102-1	171-3	534-2	485-3	566-2	108-3	334-2	308-3	359-2	773-4	216-2	221-3	255-2
0.200	174-1	615-3	195-1	157-2	193-1	165-3	490-2	420-3	519-2	114-3	341-2	289-3	359-2	864-4	227-2	225-3	271-2
0.220	760-2	305-3	868-2	645-3	872-2	157-3	435-2	333-3	450-2	133-3	353-2	280-3	380-2	105-3	273-2	220-3	300-2
0.240	630-2	310-3	821-2	551-3	812-2	178-3	452-2	315-3	467-2	141-3	342-2	253-3	369-2	122-3	301-2	223-3	320-2
0.260	125-1	556-3	135-1	841-3	134-1	362-3	876-2	552-3	876-2	236-3	566-2	360-3	570-2	155-3	369-2	236-3	376-2
0.280	399-2	435-3	982-2	568-3	577-2	259-3	617-2	337-3	582-2	193-3	453-2	253-3	433-2	149-3	344-2	197-3	335-2
0.300	279-2	294-3	605-2	335-3	617-2	204-3	443-2	232-3	427-2	173-3	369-2	200-3	362-2	143-3	309-2	170-3	301-2
0.320	124-1	680-3	136-1	679-3	133-1	341-3	698-2	342-3	669-2	199-3	406-2	198-3	391-2	148-3	298-2	150-3	290-2
0.340	237-2	314-3	644-2	278-3	581-2	229-3	441-2	203-3	424-2	171-3	307-2	152-3	316-2	138-3	263-2	125-3	255-2
0.360	188-2	201-3	382-2	159-3	351-2	164-3	289-2	129-3	286-2	143-3	256-2	113-3	251-2	129-3	235-2	103-3	225-2
0.380	637-2	393-3	645-2	278-3	651-2	178-3	295-2	125-3	294-2	144-3	249-2	102-3	239-2	130-3	228-2	954-4	215-2
0.400	339-2	308-3	469-2	196-3	483-2	240-3	361-2	153-3	377-2	180-3	303-2	115-3	283-2	142-3	241-2	929-4	224-2
0.420	401-2	487-3	749-2	282-3	729-2	293-3	479-2	170-3	439-2	214-3	352-2	125-3	321-2	151-3	253-2	890-4	227-2
0.440	901-2	655-3	933-2	346-3	935-2	340-3	489-2	180-3	486-2	226-3	329-2	120-3	324-2	159-3	249-2	848-4	227-2
0.460	522-2	394-3	577-2	190-3	538-2	302-3	399-2	146-3	412-2	216-3	300-2	104-3	295-2	153-3	238-2	769-4	209-2
0.480	524-2	407-3	531-2	181-3	534-2	262-3	314-2	116-3	343-2	218-3	267-2	985-4	286-2	165-3	222-2	752-4	217-2
0.500	450-2	380-3	459-2	155-3	477-2	259-3	317-2	106-3	325-2	221-3	272-2	915-4	278-2	174-3	225-2	725-4	218-2
0.550	188-2	236-3	306-2	800-4	470-2	182-3	422-2	617-4	207-2	168-3	219-2	576-4	192-2	164-3	210-2	570-4	187-2
0.600	235-2	334-3	386-2	951-4	350-2	241-3	274-2	686-4	252-2	191-3	230-2	554-4	200-2	179-3	200-2	534-4	188-2
0.650	421-3	388-3	410-2	939-4	375-2	325-3	258-2	792-4	314-2	272-3	229-2	662-4	263-2	231-3	188-2	576-4	223-2
0.700	359-2	483-3	435-2	100-3	433-2	410-3	338-2	858-4	368-2	361-3	274-2	757-4	324-2	288-3	243-2	614-4	258-2

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	744-2	108-2	923-2	197-3	908-2	680-3	555-2	123-3	569-2	490-3	414-2	897-4	411-2	336-3	298-2	620-4	281-2	213-3	207-2	412-4	178-2
0.80	515-2	905-3	724-2	144-3	710-2	676-3	553-2	108-3	531-2	493-3	405-2	790-4	387-2	340-3	295-2	550-4	267-2	224-3	213-2	379-4	176-2
0.85	663-2	989-3	726-2	140-3	731-2	544-3	442-2	771-4	402-2	452-3	391-2	643-4	334-2	373-3	316-2	537-4	275-2	261-3	219-2	396-4	192-2
0.90	517-2	861-3	599-2	108-3	601-2	613-3	502-2	774-4	428-2	537-3	432-2	681-4	375-2	432-3	341-2	560-4	302-2	293-3	230-2	405-4	205-2
0.95	160-2	827-3	604-2	937-4	547-2	730-3	529-2	827-4	483-2	619-3	445-2	705-4	409-2	484-3	346-2	562-4	320-2	318-3	230-2	400-4	210-2
1.00	730-2	116-2	730-2	118-3	730-2	797-3	479-2	815-4	500-2	674-3	415-2	693-4	423-2	522-3	339-2	545-4	328-2	352-3	241-2	390-4	221-2
1.10	931-2	184-2	108-1	156-3	105-1	123-2	753-2	104-3	704-2	856-3	493-2	728-4	489-2	593-3	359-2	513-4	339-2	407-3	250-2	380-4	232-2
1.20	757-2	161-2	872-2	114-3	846-2	125-2	694-2	892-4	657-2	935-3	519-2	668-4	489-2	636-3	367-2	463-4	333-2	441-3	256-2	347-4	231-2
1.30	608-2	138-2	666-2	838-4	669-2	100-2	549-2	611-4	487-2	769-3	454-2	648-4	371-2	616-3	349-2	381-4	297-2	449-3	247-2	305-4	217-2
1.40	278-2	827-3	441-2	431-4	371-1	768-3	404-2	401-4	344-2	694-3	362-2	365-4	311-2	593-3	315-2	316-4	266-2	444-3	254-2	270-4	199-2
1.50	399-2	970-3	402-2	441-4	406-2	669-3	352-2	304-4	280-2	628-3	336-2	288-4	263-2	558-3	306-2	263-4	233-2	434-3	262-2	240-4	181-2
1.60	265-2	816-3	332-2	326-4	320-2	619-3	326-2	247-4	243-2	582-3	316-2	235-4	228-2	522-3	295-2	219-4	205-2	423-3	268-2	215-4	166-2
1.70	247-2	884-3	325-2	313-4	326-2	599-3	317-2	212-4	221-2	598-3	304-2	213-4	221-2	542-3	294-2	198-4	200-2	425-3	271-2	194-4	157-2
1.80	244-2	107-2	352-2	339-4	374-2	959-3	313-2	303-4	335-2	830-3	306-2	264-4	289-2	660-3	296-2	216-4	230-2	460-3	275-2	176-4	160-2
1.90	642-2	201-2	660-2	569-4	664-2	140-2	456-2	398-4	465-2	108-2	351-2	309-4	360-2	786-3	298-2	226-4	259-2	515-3	277-2	161-4	170-2
2.00	675-2	237-2	744-2	607-4	746-2	165-2	510-2	422-4	518-2	124-2	399-2	319-4	391-2	866-3	300-2	226-4	272-2	551-3	279-2	154-4	173-2
2.20	535-2	194-2	560-2	411-4	556-2	153-2	434-2	324-4	438-2	118-2	351-2	251-4	337-2	881-3	296-2	188-4	251-2	584-3	279-2	135-4	166-2
2.40	332-2	149-2	388-2	266-4	392-2	126-2	328-2	225-4	330-2	107-2	290-2	192-4	281-2	839-3	287-2	152-4	219-2	612-3	278-2	119-4	160-2
2.60	574-2	237-2	574-2	359-4	574-2	103-2	277-2	156-4	250-2	953-3	278-2	145-4	230-2	869-3	280-2	137-4	210-2	642-3	277-2	110-4	155-2
2.80	395-2	181-2	406-2	237-4	407-2	133-2	316-2	173-4	298-2	116-2	276-2	151-4	260-2	100-2	279-2	133-4	225-2	733-3	278-2	104-4	164-2
3.00	616-2	300-2	627-2	341-4	628-2	190-2	409-2	216-4	399-2	156-2	337-2	178-4	327-2	120-2	284-2	141-4	251-2	835-3	281-2	105-4	175-2
3.20	410-2	327-2	646-2	326-4	642-2	230-2	471-2	230-4	452-2	186-2	383-2	187-4	366-2	138-2	307-2	142-4	272-2	939-3	286-2	104-4	184-2
3.40	411-2	290-2	562-2	257-4	536-2	239-2	456-2	212-4	443-2	197-2	390-2	176-4	364-2	149-2	311-2	136-4	275-2	102-2	292-2	990-5	189-2
3.60	680-2	403-2	693-2	318-4	704-2	229-2	424-2	181-4	400-2	196-2	373-2	155-4	342-2	152-2	313-2	123-4	266-2	109-2	298-2	946-5	191-2
3.80	269-2	256-2	437-2	181-4	423-2	226-2	397-2	160-4	374-2	198-2	348-2	139-4	324-2	162-2	321-2	117-4	268-2	117-2	302-2	898-5	193-2
4.00	478-2	355-2	553-2	227-4	558-2	238-2	400-2	152-4	374-2	202-2	343-2	130-4	318-2	171-2	325-2	113-4	269-2	122-2	305-2	850-5	192-2
4.20	822-2	585-2	873-2	339-4	876-2	258-2	415-2	150-4	387-2	218-2	356-2	127-4	327-2	178-2	328-2	108-4	267-2	125-2	307-2	814-5	187-2
4.40	424-2	409-2	595-2	216-4	585-2	271-2	422-2	143-4	388-2	231-2	367-2	123-4	330-2	182-2	327-2	995-5	260-2	132-2	308-2	796-5	188-2
4.60	442-2	404-2	553-2	195-4	551-2	279-2	433-2	135-4	381-2	232-2	380-2	113-4	317-2	183-2	325-2	939-5	250-2	136-2	307-2	776-5	186-2
4.80	369-2	458-2	601-2	203-4	600-2	274-2	427-2	121-4	358-2	235-2	371-2	105-4	307-2	191-2	321-2	900-5	250-2	138-2	305-2	744-5	180-2
5.00	700-2	559-2	700-2	228-4	702-2	279-2	414-2	114-4	351-2	241-2	360-2	100-4	303-2	194-2	316-2	830-5	244-2	138-2	302-2	701-5	174-2
5.50	267-2	352-2	439-2	119-4	402-2	265-2	408-2	898-5	303-2	226-2	371-2	771-5	258-2	180-2	323-2	635-5	205-2	127-2	292-2	560-5	145-2
6.00	444-2	424-2	444-2	120-4	444-2	236-2	359-2	672-5	247-2	209-2	326-2	610-5	219-2	175-2	294-2	532-5	183-2	129-2	282-2	483-5	135-2
6.50	855-3	256-2	312-2	621-5	248-2	236-2	299-2	573-5	228-2	209-2	279-2	514-5	202-2	174-2	267-2	447-5	169-2	129-2	271-2	448-5	124-2
7.00	306-2	342-2	307-2	714-5	307-2	220-2	291-2	460-5	197-2	195-2	280-2	416-5	175-2	168-2	265-2	372-5	151-2	128-2	261-2	408-5	115-2
7.50	293-2	293-2	305-2	533-5	245-2	180-2	297-2	330-5	151-2	170-2	287-2	319-5	142-2	153-2	272-2	299-5	128-2	124-2	252-2	367-5	104-2
8.00	245-2	376-2	303-2	601-5	295-2	238-2	297-2	381-5	187-2	148-2	288-2	238-5	116-2	134-2	275-2	252-5	105-2	117-2	255-2	328-5	920-3

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
1111G106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP S90W
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

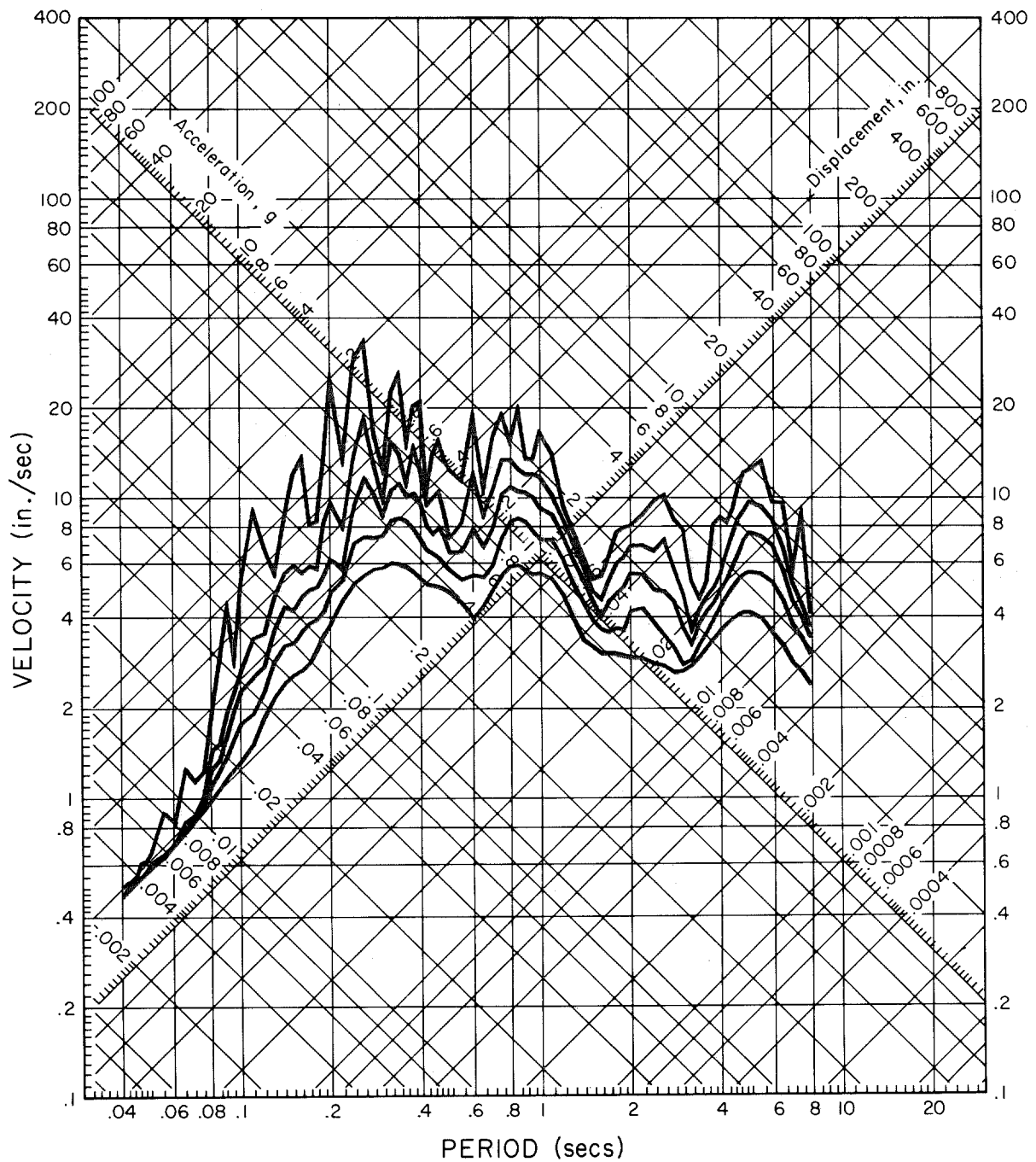


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP S90W

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
 I11G106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP S90W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	613-4	324-5	160-3	207-3	509-3	303-5	112-3	194-3	476-3	304-5	108-3	195-3	478-3	304-5	107-3	195-3	477-3
0.042	311-4	353-5	123-3	205-3	529-3	344-5	115-3	199-3	515-3	338-5	118-3	196-3	506-3	336-5	118-3	195-3	502-3
0.044	318-4	372-5	155-3	196-3	532-3	378-5	131-3	200-3	541-3	372-5	132-3	196-3	531-3	368-5	131-3	194-3	526-3
0.046	154-3	446-5	208-3	215-3	609-3	398-5	163-3	192-3	543-3	401-5	153-3	194-3	548-3	401-5	147-3	193-3	548-3
0.048	874-4	475-5	208-3	210-3	621-3	441-5	174-3	195-3	577-3	436-5	169-3	193-3	571-3	436-5	164-3	193-3	571-3
0.050	687-4	532-5	271-3	217-3	668-3	487-5	186-3	199-3	612-3	479-5	183-3	195-3	602-3	472-5	181-3	193-3	593-3
0.055	492-3	786-5	550-3	266-3	898-3	573-5	301-3	193-3	654-3	556-5	260-3	188-3	636-3	558-5	231-3	188-3	637-3
0.060	383-3	796-5	459-3	226-3	834-3	681-5	313-3	193-3	714-3	683-5	298-3	194-3	715-3	675-5	275-3	191-3	707-3
0.065	632-3	130-4	907-3	315-3	125-2	868-5	390-3	210-3	839-3	815-5	346-3	197-3	883-3	807-5	334-3	196-3	880-3
0.070	153-3	127-4	716-3	265-3	114-2	986-5	466-3	205-3	885-3	961-5	449-3	200-3	863-3	947-5	429-3	197-3	850-3
0.075	706-3	148-4	930-3	269-3	124-2	122-4	653-3	223-3	102-2	123-4	612-3	223-3	103-2	115-4	537-3	212-3	968-3
0.080	133-2	253-4	173-2	404-3	198-2	185-4	100-2	296-3	145-2	160-4	830-3	259-3	125-2	142-4	659-3	230-3	111-2
0.085	207-2	403-4	225-2	570-3	297-2	207-4	951-3	293-3	153-2	183-4	904-3	260-3	135-2	169-4	823-3	240-3	125-2
0.090	320-2	625-4	425-2	789-3	436-2	283-4	142-2	359-3	198-2	236-4	118-2	298-3	164-2	200-4	988-3	258-3	139-2
0.095	132-2	446-4	272-2	505-3	295-2	349-4	157-2	395-3	231-2	303-4	148-2	345-3	200-2	242-4	121-2	274-3	160-2
0.100	252-2	832-4	484-2	851-3	523-2	429-4	209-2	438-3	269-2	366-4	173-2	372-3	230-2	285-4	140-2	292-3	179-2
0.110	878-2	160-3	915-2	135-2	918-2	602-4	302-2	513-3	344-2	530-4	204-2	378-3	259-2	339-4	164-2	292-3	193-2
0.120	238-2	131-3	578-2	935-3	689-2	682-4	276-2	487-3	373-2	766-4	273-2	469-3	370-2	603-4	214-2	364-3	291-2
0.130	457-2	116-3	556-2	706-3	564-2	978-4	371-2	591-3	473-2	970-4	346-2	512-3	435-2	726-4	258-2	384-3	326-2
0.140	800-2	193-3	856-2	100-2	867-2	126-3	502-2	662-3	567-2	101-3	366-2	464-3	424-2	790-4	286-2	369-3	331-2
0.150	542-2	290-3	111-1	132-2	121-1	143-3	573-2	652-3	603-2	120-3	398-2	485-3	471-2	926-4	303-2	376-3	363-2
0.160	137-1	351-3	137-1	140-2	138-1	145-3	510-2	581-3	569-2	134-3	389-2	476-3	496-2	104-3	300-2	370-3	385-2
0.170	824-2	223-3	828-2	790-3	826-2	161-3	477-2	574-3	598-2	145-3	381-2	461-3	508-2	113-3	286-2	362-3	396-2
0.180	287-2	241-3	778-2	763-3	844-2	167-3	452-2	527-3	585-2	169-3	444-2	481-3	561-2	127-3	341-2	367-3	423-2
0.190	607-2	416-3	126-1	117-2	137-1	254-3	715-2	719-3	841-2	201-3	590-2	519-3	631-2	155-3	418-2	401-3	487-2
0.200	182-1	803-3	240-1	205-2	252-1	311-3	957-2	791-3	977-2	207-3	560-2	447-3	591-2	183-3	481-2	413-3	537-2
0.220	988-2	478-3	136-1	101-2	136-1	284-3	742-2	601-3	811-2	486-3	118-1	749-3	117-1	311-3	749-2	490-3	752-2
0.240	289-1	112-2	295-1	200-2	295-1	537-3	140-1	958-3	140-1	363-3	915-2	643-3	951-2	272-3	648-2	484-3	713-2
0.260	236-1	140-2	333-1	212-2	340-1	774-3	185-1	118-2	187-1	486-3	118-1	749-3	117-1	311-3	749-2	490-3	752-2
0.280	137-1	731-3	161-1	954-3	164-1	576-3	127-1	756-3	129-1	460-3	101-1	601-3	103-1	332-3	702-2	426-3	756-2
0.300	119-1	600-3	125-1	682-3	125-1	477-3	103-1	544-3	999-2	420-3	920-2	485-3	881-2	361-3	702-2	426-3	756-2
0.320	138-1	117-2	233-1	117-2	230-1	788-3	159-1	788-3	154-1	545-3	108-1	551-3	107-1	433-3	763-2	439-3	851-2
0.340	207-1	142-2	265-1	126-2	263-1	763-3	148-1	675-3	141-1	610-3	112-1	542-3	112-1	469-3	878-2	431-3	867-2
0.360	149-1	881-3	152-1	695-3	153-1	645-3	121-1	506-3	112-1	583-3	102-1	465-3	101-1	485-3	894-2	385-3	847-2
0.380	123-1	124-2	201-1	881-3	205-1	900-3	141-1	640-3	148-1	634-3	106-1	455-3	104-1	481-3	882-2	350-3	795-2
0.400	191-1	135-2	212-1	865-3	212-1	795-3	131-1	509-3	124-1	617-3	102-1	399-3	969-2	467-3	859-2	303-3	734-2
0.420	751-2	704-3	108-1	408-3	105-1	641-3	107-1	370-3	959-2	546-3	961-2	322-3	817-2	454-3	820-2	270-3	679-2
0.440	663-2	988-3	147-1	522-3	141-1	710-3	112-1	376-3	101-1	535-3	885-2	284-3	764-2	462-3	809-2	247-3	659-2
0.460	147-1	114-2	151-1	555-3	157-1	780-3	106-1	376-3	106-1	588-3	916-2	283-3	803-2	467-3	803-2	231-3	638-2
0.480	116-1	103-2	139-1	461-3	136-1	689-3	101-1	306-3	902-2	573-3	891-2	256-3	751-2	464-3	773-2	209-3	607-2
0.500	113-1	995-3	123-1	407-3	125-1	591-3	793-2	242-3	743-2	529-3	807-2	218-3	665-2	462-3	742-2	196-3	581-2
0.550	111-1	100-2	118-1	340-3	115-1	734-3	939-2	249-3	838-2	583-3	752-2	200-3	666-2	470-3	644-2	154-3	536-2
0.600	146-1	180-2	196-1	513-3	189-1	116-2	124-1	329-3	121-1	761-3	847-2	216-3	797-2	531-3	644-2	154-3	536-2
0.650	716-2	111-2	110-1	270-3	107-1	911-3	859-2	220-3	881-2	715-3	684-2	174-3	692-2	567-3	644-2	140-3	548-2
0.700	128-1	181-2	162-1	378-3	162-1	120-2	108-1	252-3	108-1	899-3	876-2	189-3	807-2	676-3	748-2	143-3	607-2

DAMPING = 0 PER CENT

DAMPING = 2 PER CENT

DAMPING = 5 PER CENT

DAMPING = 10 PER CENT

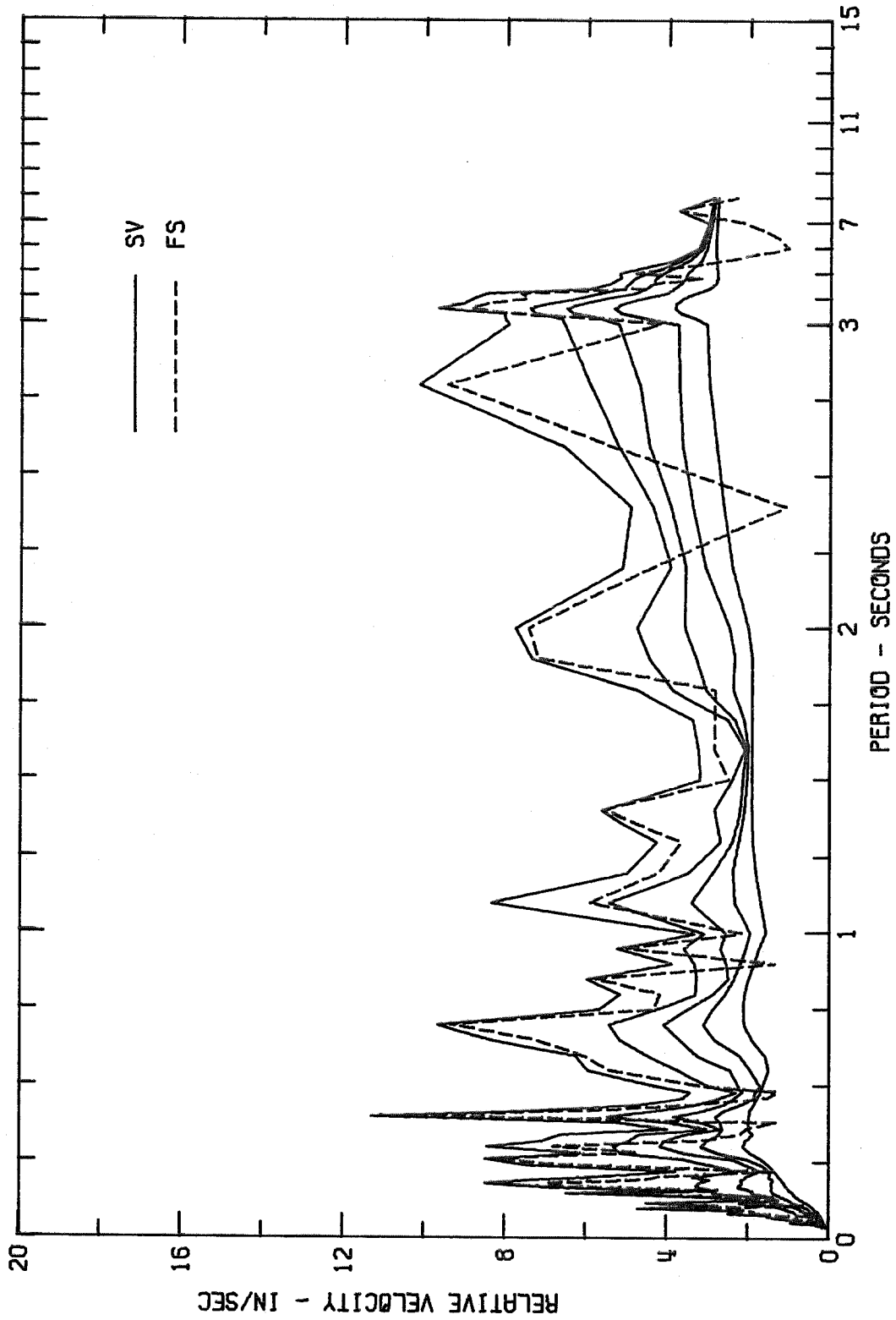
DAMPING = 20 PER CENT

111G106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP S90W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
		DAMPING = 0 PER CENT			DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT
0.75	179-1	229-2	191-1	417-3	192-1	161-2	150-1	293-3	135-1	124-2	114-1	226-3	103-1	893-3	838-2	166-3	748-2
0.80	102-1	197-2	154-1	315-3	154-1	171-2	133-1	274-3	134-1	139-2	108-1	225-3	109-1	107-2	780-2	176-3	841-2
0.85	197-1	270-2	199-1	382-3	199-1	170-2	126-1	241-3	125-1	143-2	107-1	205-3	106-1	116-2	821-2	171-3	861-2
0.90	754-2	194-2	148-1	246-3	136-1	173-2	132-1	218-3	120-1	150-2	112-1	192-3	105-1	120-2	878-2	158-3	839-2
0.95	120-1	205-2	154-1	232-3	135-1	182-2	135-1	206-3	120-1	153-2	118-1	174-3	101-1	118-2	976-2	139-3	781-2
1.00	151-1	264-2	167-1	270-3	166-1	188-2	148-1	192-3	118-1	149-2	127-1	153-3	937-2	116-2	101-1	124-3	733-2
1.10	115-1	246-2	139-1	208-3	140-1	180-2	125-1	152-3	102-1	155-2	109-1	132-3	887-2	127-2	918-2	113-3	729-2
1.20	685-2	178-2	131-1	127-3	936-2	162-2	123-1	115-3	851-2	142-2	112-1	101-3	746-2	118-2	987-2	891-4	622-2
1.30	248-2	159-2	120-1	963-4	769-2	145-2	115-1	880-4	702-2	127-2	108-1	776-4	618-2	106-2	991-2	652-4	514-2
1.40	491-2	141-2	108-1	739-4	635-2	131-2	105-1	689-4	591-2	118-2	101-1	623-4	532-2	992-3	951-2	525-4	445-2
1.50	211-2	127-2	974-2	581-4	536-2	117-2	945-2	533-4	490-2	108-2	944-2	498-4	453-2	937-3	902-2	441-4	392-2
1.60	442-2	140-2	906-2	560-4	550-2	116-2	901-2	466-4	458-2	101-2	889-2	412-4	400-2	934-3	861-2	387-4	367-2
1.70	387-2	174-2	863-2	616-4	643-2	145-2	858-2	516-4	538-2	122-2	848-2	436-4	451-2	969-3	827-2	358-4	358-2
1.80	772-2	221-2	824-2	658-4	772-2	173-2	819-2	550-4	606-2	137-2	812-2	439-4	481-2	105-2	797-2	348-4	369-2
1.90	657-2	242-2	785-2	686-4	801-2	192-2	783-2	546-4	636-2	152-2	780-2	435-4	504-2	110-2	769-2	321-4	364-2
2.00	393-2	258-2	793-2	660-4	811-2	221-2	752-2	566-4	694-2	179-2	751-2	460-4	562-2	133-2	744-2	349-4	419-2
2.20	801-2	311-2	864-2	657-4	888-2	244-2	706-2	517-4	698-2	195-2	705-2	415-4	558-2	149-2	701-2	326-4	428-2
2.40	865-2	375-2	973-2	666-4	983-2	255-2	660-2	454-4	669-2	188-2	660-2	338-4	494-2	146-2	660-2	264-4	264-4
2.60	972-2	425-2	104-1	644-4	102-1	301-2	717-2	456-4	729-2	201-2	682-2	306-4	487-2	144-2	638-2	232-4	348-2
2.80	804-2	379-2	855-2	495-4	852-2	258-2	736-2	337-4	580-2	200-2	703-2	262-4	448-2	141-2	661-2	200-4	317-2
3.00	764-2	375-2	786-2	426-4	786-2	228-2	718-2	259-4	478-2	176-2	696-2	202-4	370-2	134-2	665-2	169-4	281-2
3.20	433-2	266-2	690-2	266-4	523-2	184-2	686-2	184-4	362-2	166-2	677-2	167-4	326-2	148-2	659-2	152-4	290-2
3.40	230-2	249-2	658-2	220-4	460-2	230-2	661-2	204-4	425-2	206-2	661-2	184-4	381-2	176-2	654-2	160-4	325-2
3.60	428-2	304-2	649-2	239-4	530-2	269-2	653-2	213-4	470-2	240-2	656-2	191-4	419-2	206-2	654-2	166-4	359-2
3.80	820-2	495-2	822-2	351-4	820-2	305-2	663-2	216-4	505-2	271-2	664-2	193-4	448-2	239-2	660-2	172-4	396-2
4.00	764-2	552-2	855-2	353-4	868-2	355-2	685-2	227-4	558-2	312-2	681-2	200-4	491-2	276-2	672-2	180-4	434-2
4.20	624-2	553-2	833-2	320-4	828-2	443-2	713-2	257-4	663-2	358-2	703-2	208-4	535-2	315-2	687-2	187-4	471-2
4.40	615-2	645-2	101-1	341-4	922-2	533-2	827-2	282-4	762-2	416-2	724-2	220-4	594-2	354-2	702-2	192-4	505-2
4.60	109-1	800-2	109-1	386-4	109-1	628-2	908-2	303-4	858-2	478-2	743-2	232-4	654-2	392-2	714-2	193-4	536-2
4.80	112-1	930-2	120-1	413-4	121-1	698-2	967-2	310-4	914-2	557-2	756-2	248-4	729-2	426-2	723-2	194-4	558-2
5.00	113-1	987-2	127-1	404-4	124-1	775-2	100-1	317-4	975-2	612-2	773-2	252-4	770-2	452-2	728-2	191-4	568-2
5.50	131-1	116-1	133-1	394-4	133-1	821-2	101-1	278-4	938-2	654-2	817-2	222-4	747-2	490-2	722-2	169-4	559-2
6.00	644-2	925-2	102-1	262-4	569-2	803-2	895-2	228-4	841-2	664-2	741-2	189-4	696-2	500-2	693-2	146-4	523-2
6.50	870-2	997-2	964-2	241-4	964-2	708-2	768-2	171-4	684-2	595-2	702-2	145-4	575-2	470-2	651-2	118-4	455-2
7.00	134-2	640-2	698-2	133-4	575-2	576-2	669-2	120-4	517-2	502-2	627-2	105-4	451-2	421-2	605-2	921-5	378-2
7.50	892-2	106-1	894-2	193-4	892-2	523-2	591-2	956-5	438-2	475-2	557-2	884-5	398-2	409-2	560-2	779-5	342-2
8.00	164-2	523-2	614-2	836-5	411-2	474-2	599-2	763-5	372-2	438-2	578-2	726-5	344-2	387-2	547-2	667-5	304-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
11116106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

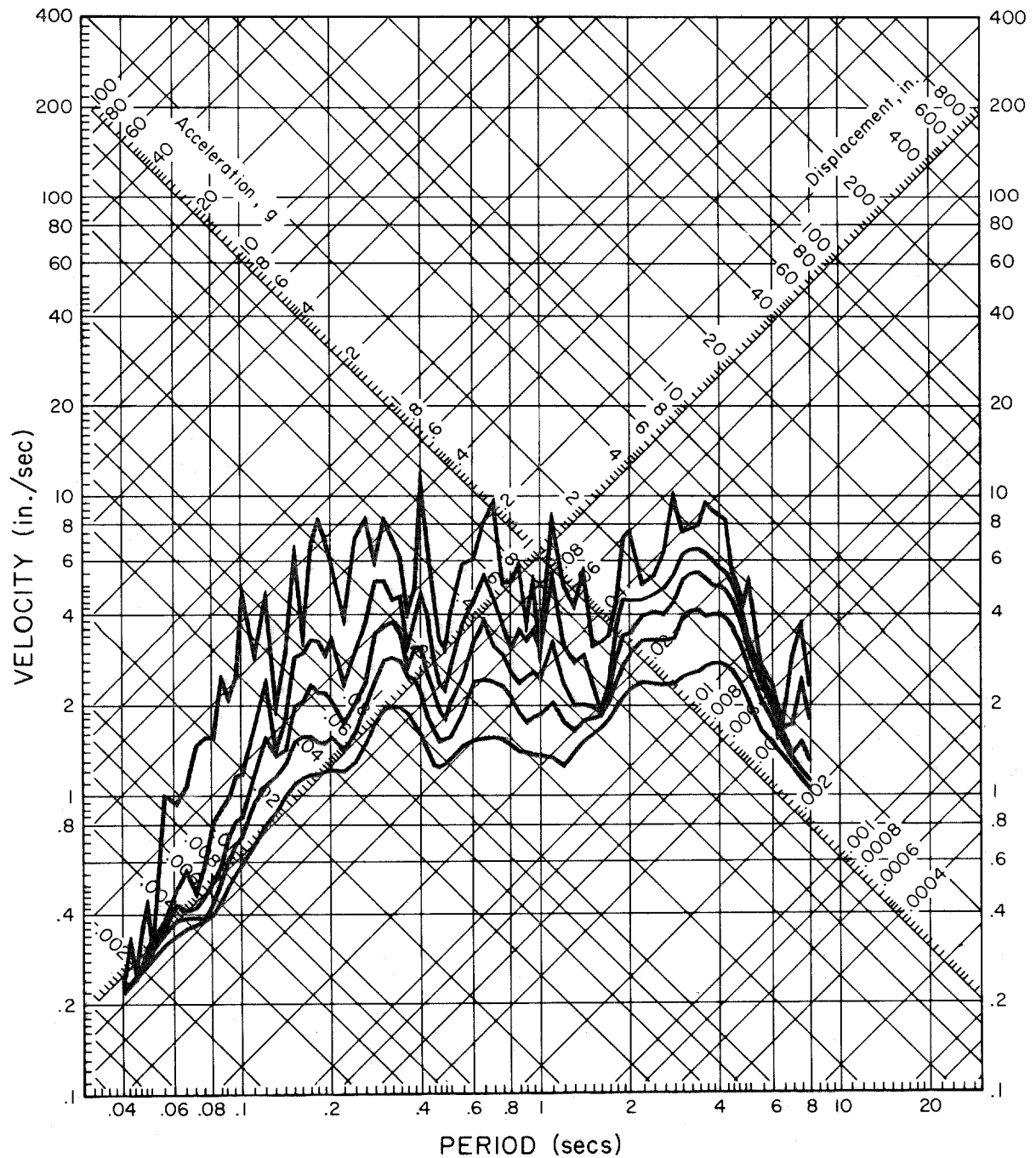


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

111G106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIG106 71.018.0 CALTECH SEISMOLOGICAL LAB., PASADENA, CAL. COMP DOWN

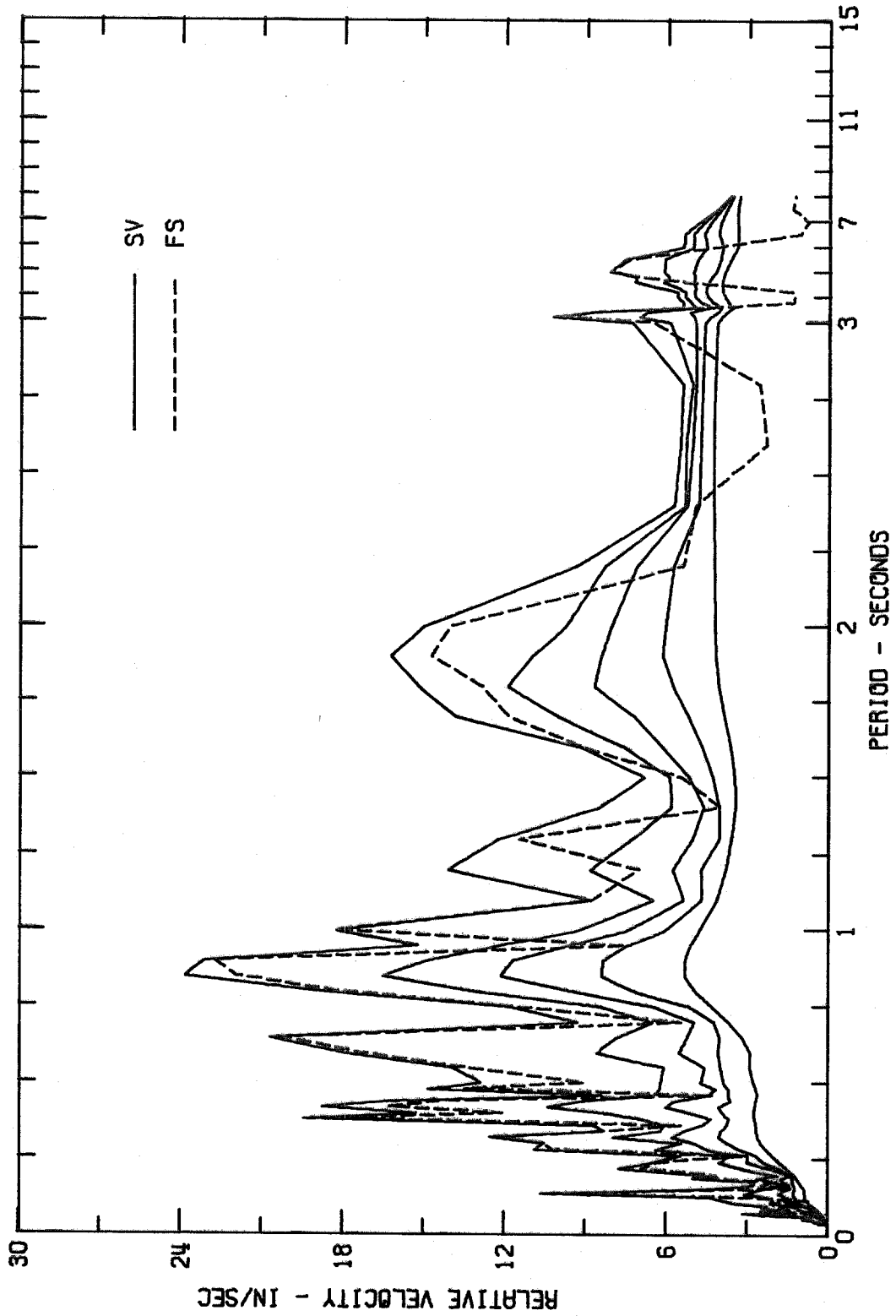
THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND C FOR SA

DAMPING = 0 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV		
0.040	955-4	151-5	172-3	965-4	237-3	149-5	768-4	958-4	235-3	146-5	686-4	934-4	229-3	144-5	660-4	928-4	227-3	142-5	630-4	920-4	223-3	142-5	630-4	920-4	223-3	142-5	630-4	920-4	223-3	142-5	630-4	920-4	223-3	142-5	630-4	920-4	223-3		
0.042	135-3	221-5	169-3	128-3	331-3	159-5	799-4	926-4	239-3	160-5	730-4	932-4	240-3	160-5	734-4	934-4	240-3	157-5	697-4	926-4	235-3	157-5	697-4	926-4	235-3	157-5	697-4	926-4	235-3	157-5	697-4	926-4	235-3	157-5	697-4	926-4	235-3		
0.044	109-3	181-5	124-3	959-4	259-3	171-5	849-4	908-4	245-3	177-5	834-4	936-4	252-3	178-5	825-4	945-4	254-3	173-5	772-4	934-4	248-3	173-5	772-4	934-4	248-3	173-5	772-4	934-4	248-3	173-5	772-4	934-4	248-3	173-5	772-4	934-4	248-3		
0.046	288-3	265-5	324-3	128-3	362-3	201-5	117-3	972-4	274-3	200-5	973-4	968-4	274-3	198-5	927-4	965-4	271-3	192-5	852-4	942-4	262-3	192-5	852-4	942-4	262-3	192-5	852-4	942-4	262-3	192-5	852-4	942-4	262-3	192-5	852-4	942-4	262-3		
0.048	201-3	336-5	256-3	149-3	440-3	242-5	113-3	107-3	317-3	230-5	103-3	102-3	301-3	221-5	103-3	991-4	289-3	211-5	939-4	950-4	276-3	211-5	939-4	950-4	276-3	211-5	939-4	950-4	276-3	211-5	939-4	950-4	276-3	211-5	939-4	950-4	276-3		
0.050	216-3	250-5	208-3	102-3	314-3	269-5	119-3	110-3	338-3	260-5	115-3	106-3	327-3	246-5	117-3	101-3	310-3	229-5	102-3	957-4	288-3	229-5	102-3	957-4	288-3	229-5	102-3	957-4	288-3	229-5	102-3	957-4	288-3	229-5	102-3	957-4	288-3		
0.055	976-3	895-5	977-3	302-3	102-2	341-5	255-3	115-3	390-3	324-5	203-3	110-3	371-3	308-5	165-3	104-3	352-3	281-5	132-3	964-4	321-3	281-5	132-3	964-4	321-3	281-5	132-3	964-4	321-3	281-5	132-3	964-4	321-3	281-5	132-3	964-4	321-3		
0.060	317-3	915-5	805-3	259-3	958-3	468-5	383-3	133-3	490-3	418-5	296-3	119-3	438-3	369-5	216-3	106-3	387-3	328-5	154-3	955-4	344-3	328-5	154-3	955-4	344-3	328-5	154-3	955-4	344-3	328-5	154-3	955-4	344-3	328-5	154-3	955-4	344-3		
0.065	896-3	114-4	104-2	276-3	110-2	588-5	464-3	142-3	569-3	434-5	318-3	104-3	420-3	409-5	227-3	100-3	395-3	377-5	171-3	926-4	364-3	377-5	171-3	926-4	364-3	377-5	171-3	926-4	364-3	377-5	171-3	926-4	364-3	377-5	171-3	926-4	364-3		
0.070	812-3	166-4	141-2	347-3	149-2	532-5	403-3	111-3	477-3	477-5	303-3	996-4	428-3	442-5	248-3	921-4	397-3	419-5	191-3	887-4	376-3	419-5	191-3	887-4	376-3	419-5	191-3	887-4	376-3	419-5	191-3	887-4	376-3	419-5	191-3	887-4	376-3		
0.075	890-3	189-4	154-2	344-3	158-2	722-5	536-3	131-3	605-3	560-5	328-3	102-3	469-3	470-5	256-3	874-4	394-3	462-5	203-3	853-4	387-3	462-5	203-3	853-4	387-3	462-5	203-3	853-4	387-3	462-5	203-3	853-4	387-3	462-5	203-3	853-4	387-3		
0.080	143-2	201-4	155-2	322-3	158-2	105-4	792-3	168-3	829-3	688-5	474-3	106-3	525-3	571-5	301-3	919-4	448-3	519-5	221-3	836-4	408-3	519-5	221-3	836-4	408-3	519-5	221-3	836-4	408-3	519-5	221-3	836-4	408-3	519-5	221-3	836-4	408-3		
0.085	196-2	339-4	250-2	481-3	251-2	124-4	841-3	175-3	920-3	798-5	487-3	113-3	590-3	712-5	355-3	101-3	526-3	609-5	257-3	900-4	450-3	609-5	257-3	900-4	450-3	609-5	257-3	900-4	450-3	609-5	257-3	900-4	450-3	609-5	257-3	900-4	450-3		
0.090	182-2	308-4	214-2	389-3	215-2	144-4	869-3	182-3	100-2	106-4	608-3	136-3	746-3	890-5	435-3	113-3	622-3	727-5	297-3	955-4	508-3	727-5	297-3	955-4	508-3	727-5	297-3	955-4	508-3	727-5	297-3	955-4	508-3	727-5	297-3	955-4	508-3		
0.095	215-2	385-4	245-2	437-3	255-2	178-4	104-2	201-3	117-2	126-4	704-3	145-3	835-3	105-4	480-3	120-3	694-3	843-5	346-3	993-4	558-3	843-5	346-3	993-4	558-3	843-5	346-3	993-4	558-3	843-5	346-3	993-4	558-3	843-5	346-3	993-4	558-3		
0.100	472-2	772-4	461-2	789-3	485-2	190-4	110-2	193-3	119-2	137-4	734-3	142-3	862-3	118-4	538-3	125-3	747-3	958-5	390-3	103-3	602-3	958-5	390-3	103-3	602-3	958-5	390-3	103-3	602-3	958-5	390-3	103-3	602-3	958-5	390-3	103-3	602-3		
0.110	617-3	523-4	273-2	442-3	298-2	304-4	145-2	258-3	174-2	210-4	979-3	177-3	120-2	169-4	712-3	144-3	970-3	121-4	467-3	105-3	696-3	121-4	467-3	105-3	696-3	121-4	467-3	105-3	696-3	121-4	467-3	105-3	696-3	121-4	467-3	105-3	696-3		
0.120	181-2	896-4	198-2	413-4	250-2	295-4	132-2	178-3	142-2	285-4	126-2	173-3	138-2	245-4	101-2	147-3	118-2	186-4	706-3	117-3	899-3	186-4	706-3	117-3	899-3	186-4	706-3	117-3	899-3	186-4	706-3	117-3	899-3	186-4	706-3	117-3	899-3		
0.130	139-2	413-4	295-2	358-3	307-2	409-4	162-2	212-3	184-2	321-4	138-2	169-3	144-2	292-4	120-2	157-3	131-2	227-4	830-3	126-3	102-2	227-4	830-3	126-3	102-2	227-4	830-3	126-3	102-2	227-4	830-3	126-3	102-2	227-4	830-3	126-3	102-2		
0.140	258-2	686-4	452-2	636-3	469-2	465-4	222-2	332-3	243-2	303-4	134-2	216-3	158-2	210-4	897-3	150-3	110-2	154-4	573-3	113-3	810-3	154-4	573-3	113-3	810-3	154-4	573-3	113-3	810-3	154-4	573-3	113-3	810-3	154-4	573-3	113-3	810-3		
0.150	606-2	155-3	295-2	708-3	653-2	705-4	289-2	319-3	295-2	484-4	191-2	218-3	202-2	368-4	137-2	168-3	134-2	265-4	888-3	128-3	111-2	265-4	888-3	128-3	111-2	265-4	888-3	128-3	111-2	265-4	888-3	128-3	111-2	265-4	888-3	128-3	111-2		
0.160	274-2	879-4	344-2	351-3	345-2	779-4	280-2	312-3	306-2	537-4	189-2	217-3	211-2	407-4	142-2	165-3	159-2	296-4	976-3	127-3	116-2	296-4	976-3	127-3	116-2	296-4	976-3	127-3	116-2	296-4	976-3	127-3	116-2	296-4	976-3	127-3	116-2		
0.170	660-2	190-3	698-2	672-3	702-2	913-4	328-2	324-3	337-2	645-4	224-2	231-3	238-2	432-4	141-2	156-3	160-2	324-4	104-2	123-3	119-2	324-4	104-2	123-3	119-2	324-4	104-2	123-3	119-2	324-4	104-2	123-3	119-2	324-4	104-2	123-3	119-2		
0.180	698-2	244-3	851-2	770-3	851-2	956-4	324-2	303-3	333-2	646-4	216-2	205-3	225-2	439-4	143-2	143-3	153-2	342-4	110-2	117-3	119-2	342-4	110-2	117-3	119-2	342-4	110-2	117-3	119-2	342-4	110-2	117-3	119-2	342-4	110-2	117-3	119-2		
0.190	453-2	220-3	732-2	626-3	730-2	909-4	295-2	257-3	300-2	680-4	217-2	193-3	224-2	660-4	138-2	132-3	152-2	370-4	117-2	113-3	123-2	370-4	117-2	113-3	123-2	370-4	117-2	113-3	123-2	370-4	117-2	113-3	123-2	370-4	117-2	113-3	123-2		
0.200	425-2	191-3	596-2	490-3	602-2	109-3	336-2	279-3	342-2	671-4	207-2	173-3	210-2	506-4	146-2	132-3	159-2	393-4	123-2	104-3	123-2	393-4	123-2	104-3	123-2	393-4	123-2	104-3	123-2	393-4	123-2	104-3	123-2	393-4	123-2	104-3	123-2		
0.220	135-2	137-3	377-2	290-3	392-2	842-4	228-2	176-3	240-2	622-4	170-2	130-3	177-2	506-4	146-2	114-3	144-2	428-4	134-2	101-3	122-2	428-4	134-2	101-3	122-2	428-4	134-2	101-3	122-2	428-4	134-2	101-3	122-2	428-4	134-2	101-3	122-2		
0.240	676-2	283-3	742-2	503-3	741-2	119-3	290-2	212-3	311-2	795-4	203-2	139-3	208-2	634-4	166-2	115-3	166-2	504-4	149-2	989-4	132-2	504-4	149-2	989-4	132-2	504-4	149-2	989-4	132-2	504-4	149-2	989-4	132-2	504-4	149-2	989-4	132-2		
0.260	835-2	354-3	850-2	535-3	855-2	160-3	363-2	245-3	388-2	101-3	243-2	151-3	244-2	845-4	205-2	127-3	204-2	629-4	169-2	100-3	152-2	629-4	169-2	100-3	152-2	629-4	169-2	100-3	152-2	629-4	169-2	100-3	152-2	629-4	169-2	100-3	152-2		
0.280	469-2	272-3	610-2	355-3	610-2	234-3	516-2	304-3	526-2	159-3	360-2	207-3	358-2	110-3	275-2	147-3	248-2	792-4	195-2	111-3	177-2	792-4	195-2	111-3	177-2	792-4	195-2	111-3	177-2	792-4	195-2	111-3	177-2	792-4	195-2	111-3	177-2		
0.300	683-2																																						

DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

PPER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV				
0.75	433-2	619-3	564-2	112-3	518-2	451-3	425-2	822-4	377-2	358-3	349-2	655-4	300-2	281-3	286-2	522-4	235-2	187-3	213-2	362-4	156-2
0.80	417-2	666-3	514-2	106-3	523-2	401-3	328-2	642-4	315-2	332-3	286-2	538-4	261-2	275-3	256-2	453-4	216-2	191-3	208-2	332-4	150-2
0.85	578-2	813-3	598-2	115-2	601-2	494-3	327-2	700-4	365-2	326-3	248-2	464-4	241-2	261-3	235-2	382-4	192-2	192-3	198-2	302-4	142-2
0.90	132-2	542-3	386-2	685-4	378-2	480-3	332-2	607-4	335-2	362-3	255-2	461-4	253-2	254-3	218-2	334-4	177-2	202-3	185-2	288-4	141-2
0.95	500-2	793-3	524-2	898-4	524-2	546-3	359-2	618-4	361-2	397-3	269-2	453-4	263-2	282-3	204-2	324-4	186-2	210-3	172-2	271-4	138-2
1.00	217-2	484-3	331-2	125-4	304-2	492-3	309-2	504-4	309-2	394-3	255-2	406-4	248-2	300-3	195-2	311-4	189-2	219-3	156-2	254-4	138-2
1.10	592-2	148-2	837-2	125-3	847-2	949-3	544-2	804-4	542-2	578-3	341-2	490-4	330-2	364-3	234-2	317-4	208-2	237-3	170-2	243-4	135-2
1.20	419-2	962-3	497-2	683-4	503-2	612-3	346-2	434-4	320-2	457-3	287-2	327-4	239-2	342-3	238-2	248-4	179-2	244-3	182-2	216-4	127-2
1.30	364-2	891-3	425-2	539-4	430-2	581-3	269-2	352-4	281-2	421-3	238-2	256-4	203-2	345-3	222-2	212-4	167-2	293-3	191-2	190-4	141-2
1.40	554-2	126-2	562-2	£59-4	567-2	669-3	284-2	350-4	300-2	455-3	219-2	238-4	204-2	403-3	208-2	216-4	181-2	343-3	192-2	195-4	154-2
1.50	248-2	765-3	319-2	347-4	320-2	568-3	239-2	258-4	238-2	480-3	212-2	219-4	201-2	438-3	202-2	204-4	183-2	389-3	192-2	194-4	163-2
1.60	285-2	843-3	324-2	336-4	331-2	493-3	208-2	197-4	193-2	485-3	205-2	195-4	190-2	476-3	201-2	195-4	187-2	436-3	192-2	192-4	171-2
1.70	285-2	946-3	338-2	335-4	349-2	651-3	252-2	230-4	240-2	611-3	234-2	218-4	226-2	569-3	213-2	206-4	210-2	499-3	192-2	192-4	184-2
1.80	282-2	128-2	474-2	407-4	450-2	106-2	388-2	337-4	373-2	849-3	307-2	269-4	286-2	704-3	238-2	227-4	245-2	579-3	193-2	199-4	202-2
1.90	721-2	222-2	736-2	631-4	737-2	138-2	447-2	391-4	457-2	105-2	330-2	302-4	350-2	840-3	234-2	243-4	278-2	659-3	193-2	205-4	217-2
2.00	744-2	247-2	776-2	632-4	777-2	144-2	477-2	369-4	453-2	113-2	358-2	291-4	356-2	967-3	249-2	253-4	303-2	734-3	203-2	207-4	230-2
2.20	439-2	180-2	510-2	381-4	514-2	159-2	393-2	337-4	455-2	141-2	356-2	300-4	403-2	117-2	308-2	255-4	334-2	853-3	242-2	201-4	243-2
2.40	111-2	208-2	490-2	370-4	546-2	181-2	438-2	321-4	474-2	158-2	395-2	281-4	413-2	128-2	340-2	233-4	337-2	917-3	265-2	184-4	240-2
2.60	545-2	273-2	660-2	413-4	660-2	206-2	525-2	312-4	498-2	168-2	448-2	256-4	407-2	138-2	366-2	214-4	334-2	987-3	282-2	162-4	238-2
2.80	947-2	453-2	101-1	591-4	101-1	247-2	594-2	322-4	554-2	200-2	472-2	263-4	449-2	151-2	375-2	204-4	341-2	106-2	300-2	153-4	239-2
3.00	418-2	369-2	793-2	419-4	773-2	308-2	659-2	350-4	645-2	253-2	525-2	289-4	531-2	190-2	376-2	221-4	395-2	121-2	306-2	154-4	254-2
3.20	569-2	400-2	805-2	400-4	807-2	341-2	632-2	341-4	670-2	284-2	569-2	284-4	551-2	213-2	459-2	218-4	419-2	132-2	335-2	145-4	260-2
3.30	805-2	436-2	806-2	385-4	805-2	365-2	732-2	323-4	675-2	303-2	639-2	270-4	561-2	227-2	518-2	205-4	420-2	142-2	371-2	137-4	264-2
3.60	889-2	553-2	970-2	437-4	566-2	373-2	743-2	294-4	652-2	307-2	653-2	244-4	537-2	230-2	535-2	186-4	401-2	157-2	385-2	132-4	275-2
3.80	840-2	546-2	904-2	387-4	904-2	372-2	658-2	263-4	615-2	307-2	613-2	218-4	508-2	247-2	513-2	178-4	408-2	169-2	382-2	130-4	280-2
4.00	747-2	557-2	876-2	356-4	875-2	371-2	623-2	237-4	584-2	322-2	550-2	207-4	506-2	259-2	463-2	169-4	407-2	179-2	363-2	124-4	281-2
4.20	765-2	562-2	845-2	326-4	842-2	375-2	569-2	217-4	561-2	326-2	483-2	190-4	488-2	264-2	404-2	157-4	395-2	184-2	333-2	116-4	275-2
4.40	456-2	398-2	588-2	210-4	569-2	362-2	508-2	191-4	517-2	316-2	455-2	169-4	452-2	259-2	384-2	142-4	370-2	185-2	298-2	109-4	264-2
4.60	436-2	370-2	542-2	178-4	505-2	338-2	496-2	164-4	462-2	299-2	436-2	145-4	408-2	247-2	369-2	125-4	338-2	181-2	284-2	999-5	248-2
4.80	314-2	333-2	517-2	148-4	436-2	305-2	480-2	135-4	400-2	274-2	430-2	123-4	359-2	232-2	359-2	107-4	304-2	174-2	278-2	904-5	228-2
5.00	482-2	417-2	521-2	171-4	525-2	267-2	451-2	109-4	336-2	245-2	411-2	101-4	307-2	213-2	353-2	909-5	268-2	165-2	280-2	811-5	208-2
5.50	258-2	242-2	384-2	819-5	276-2	229-2	367-2	775-5	361-2	210-2	347-2	719-5	240-2	185-2	318-2	650-5	211-2	145-2	283-2	603-5	166-2
6.00	102-2	225-2	325-2	640-5	236-2	202-2	321-2	576-5	211-2	190-2	315-2	548-5	199-2	171-2	304-2	511-5	179-2	144-2	284-2	520-5	151-2
6.50	140-2	182-2	312-2	441-5	176-2	177-2	309-2	433-5	172-2	170-2	305-2	421-5	165-2	157-2	298-2	416-5	152-2	142-2	283-2	450-5	137-2
7.00	212-2	330-2	301-2	690-5	296-2	194-2	300-2	408-5	174-2	155-2	291-2	332-5	139-2	149-2	292-2	352-5	134-2	139-2	281-2	394-5	125-2
7.50	375-2	448-2	375-2	815-5	375-2	293-2	293-2	533-5	245-2	183-2	297-2	335-5	153-2	146-2	288-2	304-5	122-2	137-2	279-2	349-5	114-2
8.00	231-2	299-2	289-2	478-5	235-2	231-2	288-2	370-5	181-2	168-2	287-2	270-5	132-2	144-2	284-2	266-5	113-2	134-2	277-2	312-5	105-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP NOOE
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL





THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

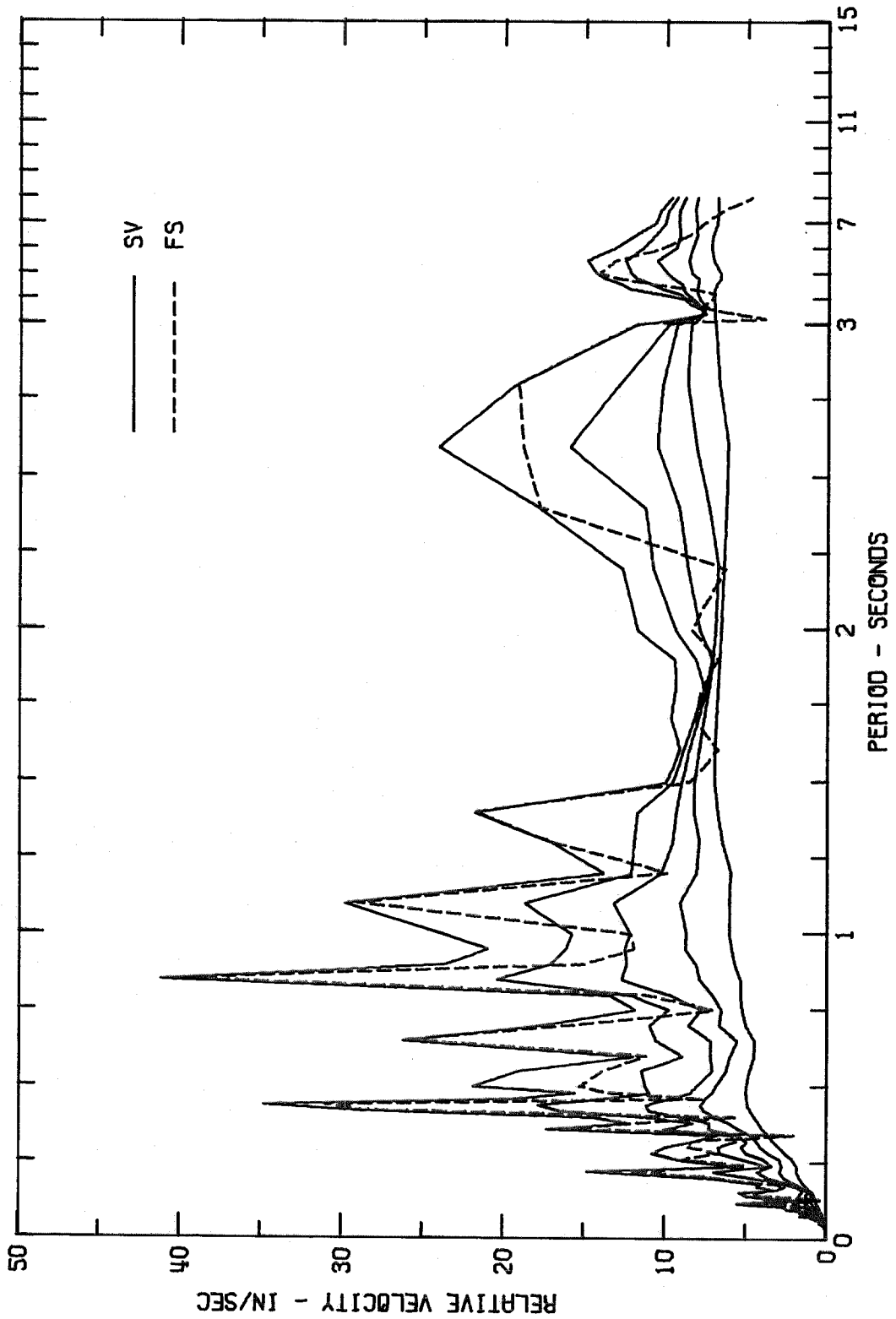
PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	241-3	286-5	331-3	183-3	449-3	184-5	100-3	118-3	290-3	173-5	871-4	111-3	273-3	167-5	797-4	107-3	263-3	159-5	638-4	102-3	251-3
0.042	249-4	242-5	215-3	140-3	362-3	184-5	120-3	106-3	275-3	187-5	103-3	109-3	280-3	183-5	887-4	107-3	274-3	175-5	714-4	103-3	262-3
0.044	191-3	259-5	250-3	137-3	371-3	203-5	143-3	107-3	290-3	206-5	121-3	109-3	294-3	220-5	100-3	107-3	286-3	191-5	793-4	103-3	273-3
0.046	473-3	468-5	518-3	226-3	640-3	259-5	158-3	125-3	353-3	233-5	138-3	112-3	318-3	220-5	111-3	106-3	300-3	209-5	877-4	102-3	285-3
0.048	129-3	409-5	376-3	181-3	535-3	258-5	208-3	114-3	338-3	248-5	154-3	110-3	324-3	236-5	120-3	105-3	309-3	226-5	960-4	102-3	297-3
0.050	316-3	506-5	411-3	207-3	637-3	287-5	172-3	117-3	361-3	252-5	156-3	102-3	316-3	248-5	126-3	102-3	312-3	243-5	103-3	101-3	306-3
0.055	758-3	920-5	934-3	311-3	105-2	325-5	202-3	109-3	371-3	318-5	163-3	108-3	364-3	296-5	147-3	101-3	338-3	291-5	120-3	100-3	332-3
0.060	785-3	972-5	943-3	276-3	101-2	430-5	308-3	121-3	451-3	380-5	232-3	107-3	398-3	358-5	182-3	102-3	375-3	346-5	139-3	100-3	363-3
0.065	582-3	122-4	104-2	295-3	117-2	637-5	493-3	154-3	616-3	505-5	312-3	122-3	488-3	421-5	211-3	103-3	407-3	411-5	171-3	101-3	397-3
0.070	239-2	299-4	257-2	624-3	268-2	753-5	601-3	156-3	675-3	618-5	358-3	130-3	554-3	525-5	259-3	112-3	471-3	486-5	212-3	102-3	436-3
0.075	303-2	388-4	319-2	706-3	325-2	113-4	864-3	217-3	100-2	767-5	491-3	140-3	643-3	629-5	329-3	115-3	527-3	562-5	255-3	104-3	470-3
0.080	366-3	186-4	119-2	298-3	146-2	119-4	738-3	181-3	889-3	806-5	493-3	129-3	633-3	694-5	359-3	111-3	545-3	636-5	300-3	104-3	499-3
0.085	210-2	367-4	252-2	519-3	271-2	128-4	745-3	183-3	952-3	940-5	498-3	132-3	695-3	800-5	373-3	113-3	591-3	722-5	358-3	104-3	533-3
0.090	143-2	311-4	187-2	392-3	217-2	187-4	115-2	237-3	130-2	120-4	707-3	151-3	840-3	982-5	506-3	125-3	685-3	826-5	430-3	108-3	577-3
0.095	177-2	391-4	246-2	443-3	258-2	191-4	111-2	217-3	126-2	143-4	732-3	163-3	948-3	124-4	633-3	141-3	823-3	985-5	506-3	116-3	651-3
0.100	197-2	364-4	226-2	372-3	288-2	239-4	132-2	245-3	150-2	170-4	861-3	175-3	106-3	151-4	763-3	154-3	954-3	114-4	577-3	123-3	720-3
0.110	213-2	676-4	361-2	572-3	386-2	419-4	215-2	352-3	239-2	298-4	145-2	255-3	170-2	220-4	106-2	189-3	126-2	153-4	738-3	134-3	877-3
0.120	739-3	770-4	393-2	547-3	403-2	458-4	204-2	326-3	240-2	362-4	162-2	255-3	189-2	273-4	120-2	196-3	143-2	187-4	826-3	140-3	980-3
0.130	304-2	975-4	441-2	590-3	471-2	519-4	220-2	316-3	251-2	381-4	152-2	228-3	184-2	300-4	124-2	187-3	145-2	213-4	898-3	137-3	103-2
0.140	106-1	241-3	106-1	125-2	408-1	724-4	312-2	378-3	324-2	464-4	187-2	242-3	208-2	339-4	131-2	182-3	152-2	238-4	899-3	130-3	107-2
0.150	642-2	154-3	642-2	704-3	648-2	645-4	265-2	294-3	270-2	421-4	165-2	195-3	176-2	347-4	126-2	160-3	145-2	267-4	914-3	126-3	112-2
0.160	139-2	106-3	407-2	426-3	419-2	605-4	233-2	240-3	237-2	409-4	146-2	165-3	160-2	362-4	124-2	145-3	142-2	305-4	911-3	127-3	120-2
0.170	248-2	754-4	271-2	266-3	278-2	552-4	147-2	195-3	204-2	475-4	142-2	169-3	175-2	423-4	126-2	152-3	156-2	355-4	999-3	130-3	131-2
0.180	190-2	870-4	271-2	274-3	304-2	647-4	214-2	203-3	226-2	550-4	169-2	174-3	192-2	488-4	133-2	157-3	170-2	408-4	108-2	132-3	142-2
0.190	495-2	160-3	503-2	455-3	531-2	826-4	264-2	233-3	273-2	614-4	175-2	174-3	203-2	551-4	136-2	157-3	182-2	466-4	117-2	137-3	154-2
0.200	411-2	144-3	439-2	369-3	454-2	701-4	184-2	180-3	220-2	636-4	140-2	162-3	199-2	606-4	133-2	155-3	190-2	535-4	125-2	140-3	168-2
0.220	694-2	275-3	779-2	581-3	785-2	129-3	324-2	306-3	370-2	971-4	214-2	206-3	277-2	846-4	182-2	177-3	241-2	693-4	154-2	153-3	197-2
0.240	624-2	263-3	648-2	467-3	688-2	181-3	406-2	320-3	475-2	145-3	301-2	257-3	380-2	117-3	241-2	209-3	307-2	900-4	182-2	164-3	235-2
0.260	317-2	238-3	545-2	361-3	577-2	156-3	361-2	238-3	378-2	153-3	297-2	232-3	369-2	143-3	268-2	223-3	347-2	111-3	207-2	176-3	268-2
0.280	102-1	509-3	109-1	665-3	114-1	318-3	643-2	415-3	714-2	239-3	449-2	311-3	536-2	185-3	328-2	243-3	415-2	131-3	179-3	294-2	294-2
0.300	105-1	507-3	105-1	576-3	106-1	281-3	542-2	321-3	589-2	267-3	497-2	301-3	559-2	216-3	374-2	246-3	453-2	151-3	250-2	182-3	316-2
0.320	125-1	637-3	124-1	636-3	125-1	415-3	799-2	417-3	815-2	313-3	580-2	311-3	614-2	235-3	406-2	240-3	462-2	162-3	261-2	173-3	319-2
0.340	810-2	482-3	830-2	426-2	891-2	347-3	620-2	306-3	641-2	292-3	528-2	257-3	541-2	234-3	398-2	214-3	433-2	173-3	269-2	164-3	321-2
0.360	544-2	526-3	872-2	415-3	919-2	361-3	607-2	284-3	631-2	272-3	467-2	215-3	475-2	229-3	377-2	181-3	400-2	179-3	269-2	151-3	312-2
0.380	183-1	119-2	194-1	845-3	197-1	424-3	700-2	301-3	702-2	271-3	433-2	191-3	448-2	227-3	368-2	164-3	376-2	187-3	274-2	142-3	310-2
0.400	120-1	962-3	152-1	615-3	151-1	545-3	819-2	347-3	856-2	331-3	504-2	212-3	520-2	255-3	392-2	167-3	401-2	192-3	276-2	132-3	302-2
0.420	162-1	129-2	187-1	748-3	193-1	708-3	104-1	410-3	106-1	427-3	603-2	250-3	640-2	280-3	407-2	165-3	419-2	199-3	272-2	123-3	298-2
0.440	141-1	115-2	162-1	609-3	164-1	645-3	913-2	342-3	921-2	403-3	567-2	214-3	576-2	277-3	362-2	148-3	396-2	200-3	269-2	114-3	286-2
0.460	429-2	679-3	834-2	328-3	927-2	518-3	642-2	250-3	708-2	361-3	443-2	174-3	493-2	259-3	371-2	128-3	353-2	201-3	261-2	105-3	275-2
0.480	135-1	114-2	148-1	508-3	149-1	537-3	622-2	239-3	703-2	369-3	414-2	164-3	484-2	260-3	389-2	117-3	340-2	205-3	268-2	978-4	268-2
0.500	904-2	104-2	128-1	425-3	130-1	508-3	618-2	208-3	639-2	338-3	471-2	138-3	425-2	271-3	389-2	112-3	341-2	209-3	278-2	928-4	263-2
0.550	135-1	124-2	139-1	419-3	141-1	573-3	607-2	193-3	655-2	429-3	458-2	145-3	491-2	343-3	400-2	117-3	392-2	255-3	293-2	919-4	292-2
0.600	174-1	177-2	179-1	503-3	185-1	824-3	858-2	234-3	862-2	524-3	553-2	149-3	548-2	418-3	410-2	121-3	438-2	313-3	288-2	947-4	327-2
0.650	203-1	217-2	207-1	526-3	210-1	847-3	782-2	205-3	818-2	566-3	523-2	138-3	547-2	456-3	403-2	112-3	440-2	364-3	319-2	948-4	352-2
0.700	543-2	100-2	925-2	209-3	900-2	704-3	649-2	146-3	632-2	572-3	497-2	120-3	514-2	517-3	424-2	110-3	464-2	418-3	369-2	953-4	375-2

IIIG107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP NOOE

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
					DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT
																	DAMPING = 20 PER CENT
0.75	117-1	143-2	118-1	260-3	119-1	102-2	847-2	186-3	856-2	790-3	650-2	144-3	661-2	680-3	516-2	126-3	570-2
0.80	182-1	237-2	187-1	380-3	186-1	170-2	130-1	271-3	133-1	127-2	943-2	205-3	100-1	891-3	717-2	145-3	699-2
0.85	219-1	329-2	238-1	466-3	243-1	221-2	165-1	313-3	163-1	157-2	121-1	224-3	116-1	103-2	842-2	149-3	762-2
0.90	227-1	334-2	230-1	422-3	233-1	201-2	148-1	254-3	140-1	154-2	116-1	196-3	107-1	110-2	834-2	142-3	772-2
0.95	750-2	226-2	152-1	256-3	149-1	181-2	121-1	205-3	120-1	142-2	960-2	162-3	940-2	105-2	742-2	123-3	700-2
1.00	182-1	293-2	182-1	300-3	184-1	129-2	928-2	132-3	812-2	109-2	744-2	113-3	690-2	935-3	603-2	982-4	588-2
1.10	873-2	152-2	874-2	129-3	873-2	113-2	645-2	956-4	645-2	949-3	536-2	806-4	542-2	789-3	468-2	689-4	450-2
1.20	701-2	267-2	141-1	189-3	140-1	176-2	884-2	125-3	926-2	118-2	577-2	844-4	619-2	792-3	471-2	575-4	414-2
1.30	114-1	248-2	121-1	150-3	119-1	147-2	728-2	893-4	713-2	996-3	503-2	606-4	481-2	691-3	402-2	430-4	334-2
1.40	399-2	177-2	846-2	924-4	794-2	126-2	579-2	661-4	567-2	962-3	460-2	507-4	432-2	735-3	405-2	402-4	330-2
1.50	545-2	166-2	678-2	755-4	696-2	139-2	588-2	634-4	584-2	114-2	516-2	522-4	479-2	885-3	430-2	411-4	370-2
1.60	917-2	233-2	916-2	932-4	916-2	187-2	758-2	751-4	737-2	145-2	615-2	584-4	571-2	106-2	470-2	432-4	417-2
1.70	118-1	350-2	138-1	126-3	131-1	252-2	100-1	895-4	934-2	186-2	722-2	663-4	690-2	137-2	519-2	495-4	509-2
1.80	128-1	444-2	152-1	140-3	155-1	333-2	118-1	105-3	116-1	250-2	867-2	794-4	875-2	175-2	578-2	565-4	614-2
1.90	147-1	477-2	162-1	138-3	161-1	345-2	109-1	979-4	114-1	272-2	841-2	775-4	900-2	195-2	615-2	566-4	646-2
2.00	140-1	481-2	149-1	122-3	150-1	320-2	973-2	820-4	100-1	263-2	804-2	677-4	827-2	196-2	604-2	516-4	618-2
2.20	538-2	298-2	932-2	630-4	851-2	258-2	825-2	545-4	737-2	215-2	708-2	458-4	615-2	170-2	574-2	369-4	487-2
2.40	493-2	187-2	570-2	333-4	491-2	161-2	532-2	286-4	421-2	151-2	522-2	270-4	397-2	139-2	481-2	252-4	364-2
2.60	232-2	133-2	550-2	202-4	322-2	128-2	529-2	193-4	309-2	132-2	505-2	200-4	319-2	127-2	474-2	196-4	306-2
2.80	259-2	239-2	541-2	311-4	536-2	199-2	504-2	260-4	448-2	156-2	492-2	204-4	350-2	133-2	468-2	175-4	300-2
3.00	658-2	338-2	733-2	383-4	709-2	261-2	593-2	297-4	548-2	196-2	496-2	224-4	410-2	147-2	459-2	172-4	308-2
3.20	991-2	505-2	102-1	504-4	991-2	332-2	706-2	331-4	652-2	217-2	502-2	219-4	427-2	167-2	443-2	169-4	328-2
3.40	866-2	497-2	870-2	440-4	919-2	348-2	669-2	308-4	644-2	235-2	516-2	209-4	435-2	174-2	412-2	159-4	322-2
3.60	436-2	315-2	540-2	248-4	550-2	269-2	492-2	213-4	470-2	222-2	434-2	176-4	388-2	176-2	400-2	142-4	307-2
3.80	132-2	209-2	542-2	148-4	346-2	206-2	513-2	146-4	341-2	201-2	477-2	143-4	332-2	178-2	432-2	128-4	294-2
4.00	131-2	197-2	565-2	126-4	310-2	199-2	536-2	127-4	314-2	205-2	499-2	131-4	322-2	188-2	451-2	122-4	295-2
4.20	132-2	282-2	561-2	164-4	423-2	263-2	536-2	152-4	394-2	242-2	503-2	141-4	363-2	207-2	459-2	122-4	310-2
4.40	313-2	387-2	646-2	204-4	553-2	341-2	568-2	180-4	488-2	290-2	495-2	154-4	414-2	229-2	457-2	124-4	327-2
4.60	539-2	461-2	721-2	223-4	631-2	356-2	617-2	191-4	541-2	323-2	504-2	157-4	441-2	241-2	449-2	121-4	330-2
4.80	716-2	581-2	718-2	258-4	761-2	440-2	594-2	195-4	576-2	329-2	500-2	147-4	431-2	240-2	437-2	111-4	314-2
5.00	814-2	657-2	815-2	269-4	826-2	493-2	614-2	201-4	619-2	340-2	504-2	140-4	428-2	247-2	422-2	104-4	311-2
5.50	733-2	641-2	753-2	216-4	732-2	490-2	609-2	165-4	559-2	357-2	488-2	121-4	408-2	270-2	402-2	978-5	308-2
6.00	410-2	417-2	539-2	118-4	436-2	345-2	501-2	983-5	362-2	305-2	454-2	880-5	319-2	259-2	394-2	781-5	271-2
6.50	106-2	305-2	535-2	738-5	254-2	275-2	505-2	668-5	266-2	244-2	466-2	604-5	236-2	220-2	413-2	571-5	213-2
7.00	781-3	257-2	481-2	538-5	231-2	236-2	464-2	494-5	212-2	208-2	439-2	443-5	187-2	174-2	402-2	403-5	156-2
7.50	138-2	247-2	416-2	450-5	207-2	231-2	411-2	422-5	193-2	209-2	400-2	388-5	175-2	178-2	380-2	359-5	149-2
8.00	126-2	221-2	364-2	354-5	174-2	211-2	366-2	339-5	165-2	196-2	364-2	323-5	154-2	174-2	356-2	308-5	136-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
1111G107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP N90E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

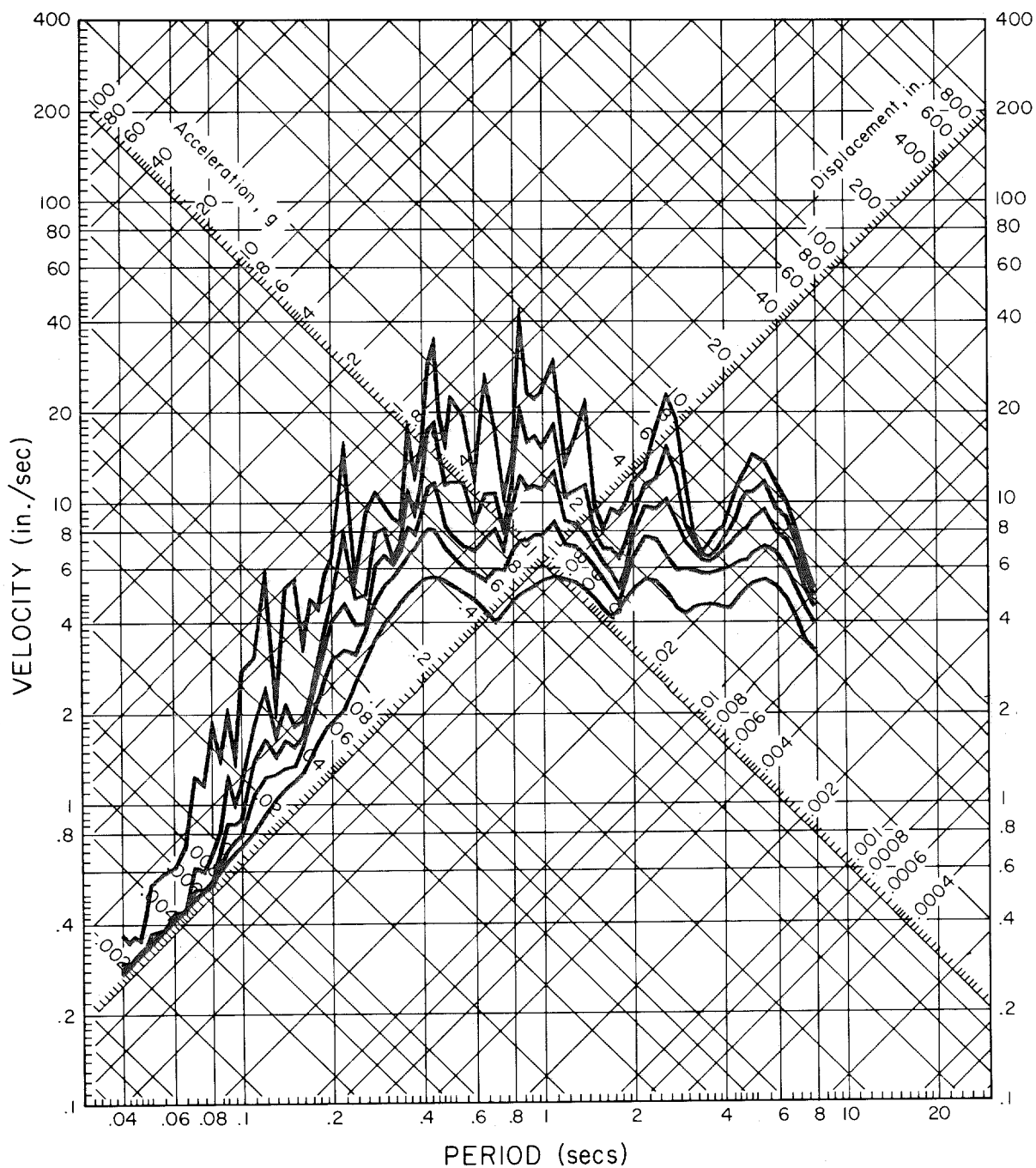


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

111G107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP N90E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIG107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP N90E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

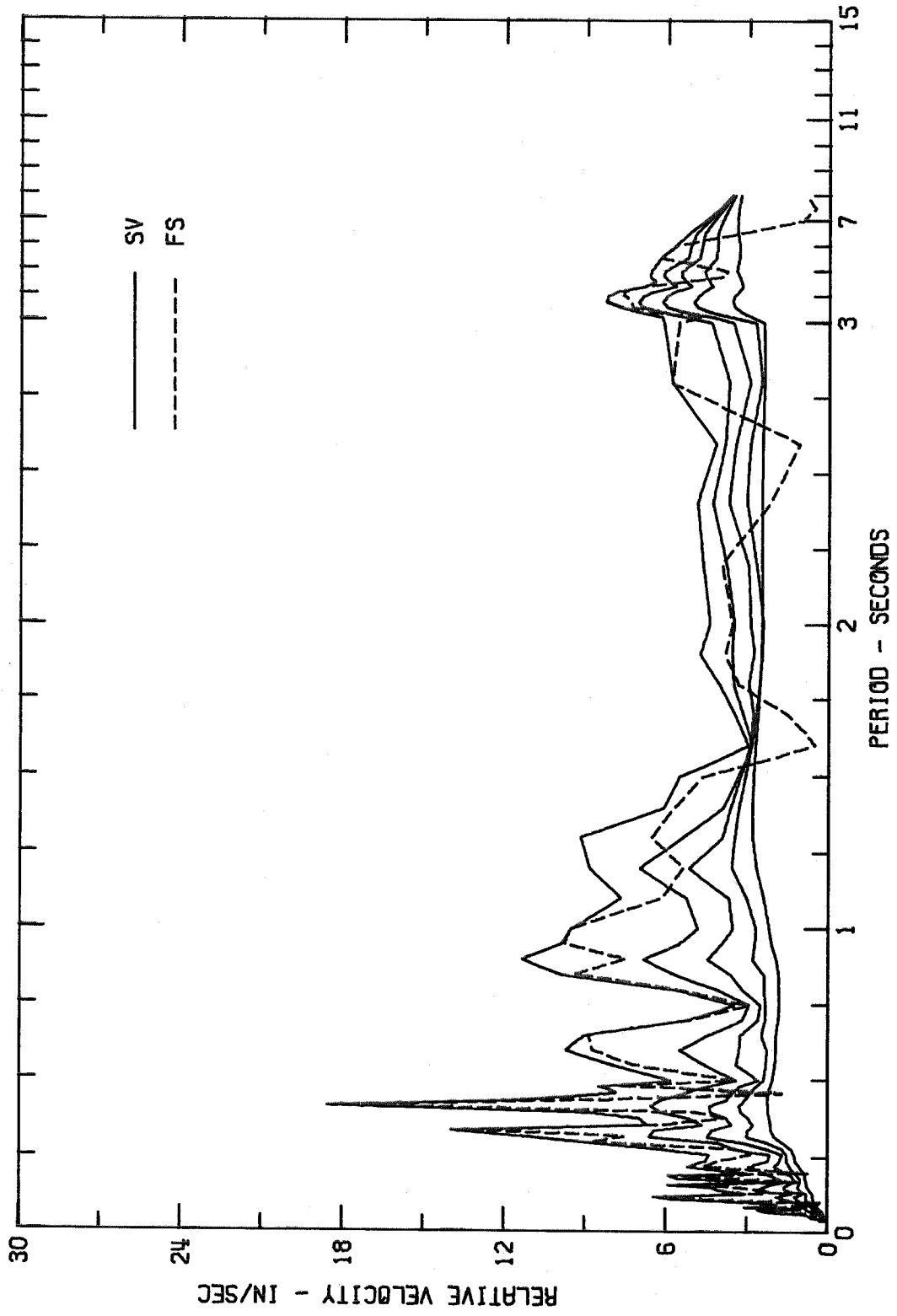
DAMPING = 0 PER CENT										DAMPING = 2 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
0.040	475-4	236-5	123-3	151-3	371-3	190-5	688-4	121-3	299-3	181-5	561-4	115-3	285-3	178-5	509-4	113-3	279-3	175-5	459-4	112-3	276-3	0.042	570-4	234-5	130-3	135-3	350-3	195-5	641-4	113-3	293-3	196-5	550-4	114-3	293-3	194-5	502-4	112-3	290-3	0.044	394-4	257-5	124-3	136-3	367-3	218-5	645-4	115-3	311-3	216-5	613-4	114-3	309-3	214-5	583-4	113-3	306-3	213-5	545-4	112-3	304-3	0.046	509-4	261-5	139-3	126-3	357-3	240-5	758-4	116-3	328-3	234-5	640-4	113-3	320-3	234-5	628-4	113-3	320-3	233-5	591-4	113-3	318-3	0.048	576-4	329-5	165-3	146-3	431-3	261-5	914-4	115-3	341-3	254-5	745-4	112-3	333-3	255-5	707-4	113-3	334-3	254-5	652-4	113-3	332-3	0.050	822-4	434-5	261-3	177-3	546-3	299-5	113-3	122-3	376-3	284-5	909-4	116-3	357-3	279-5	794-4	114-3	351-3	276-5	715-4	113-3	347-3	0.055	451-3	520-5	433-3	175-3	594-3	339-5	152-3	114-3	388-3	336-5	116-3	113-3	383-3	336-5	101-3	114-3	384-3	334-5	924-4	113-3	382-3	0.060	303-3	595-5	381-3	169-3	623-3	420-5	155-3	119-3	440-3	410-5	153-3	116-3	429-3	402-5	138-3	114-3	421-3	399-5	118-3	113-3	417-3	0.065	458-3	760-5	486-3	184-3	735-3	460-5	227-3	111-3	444-3	459-5	201-3	111-3	444-3	469-5	176-3	113-3	454-3	468-5	149-3	113-3	453-3	0.070	560-3	139-4	906-3	290-3	124-2	692-5	353-3	144-3	621-3	583-5	255-3	121-3	523-3	550-5	212-3	115-3	494-3	543-5	180-3	113-3	487-3	0.075	840-3	140-4	923-3	254-3	117-2	722-5	435-3	131-3	605-3	631-5	283-3	115-3	529-3	618-5	235-3	112-3	518-3	623-5	213-3	113-3	522-3	0.080	145-2	236-4	167-2	377-3	185-2	896-5	540-3	143-3	704-3	718-5	379-3	114-3	564-3	692-5	297-3	110-3	544-3	713-5	256-3	114-3	560-3	0.085	758-3	194-4	135-2	274-3	143-2	111-4	621-3	157-3	826-3	952-5	445-3	134-3	703-3	855-5	378-3	121-3	632-3	820-5	299-3	116-3	606-3	0.090	162-2	290-4	167-2	367-3	203-2	177-4	919-3	223-3	123-2	124-4	599-3	157-3	870-3	102-4	448-3	129-3	713-3	937-5	349-3	119-3	654-3	0.095	886-3	216-4	109-2	245-3	143-2	152-4	620-3	172-3	100-2	130-4	532-3	148-3	864-3	114-4	493-3	130-3	760-3	105-4	396-3	120-3	697-3	0.100	233-2	444-4	246-2	454-3	279-2	189-4	857-3	194-3	119-2	144-4	604-3	146-3	908-3	126-4	548-3	133-3	797-3	116-4	434-3	120-3	732-3	0.110	126-2	545-4	274-2	460-3	311-2	325-4	149-2	273-3	185-2	247-4	108-2	208-3	141-2	190-4	786-3	163-3	108-2	143-4	534-3	125-3	817-3	0.120	471-2	110-3	555-2	786-3	579-2	466-4	206-2	330-3	244-2	317-4	131-2	228-3	166-2	237-4	907-3	173-3	124-2	178-4	604-3	130-3	935-3	0.130	370-3	442-4	197-2	267-3	213-2	352-4	142-2	214-3	170-2	302-4	106-2	181-3	146-2	263-4	911-3	158-3	127-2	217-4	670-3	134-3	105-2	0.140	456-2	118-3	502-2	616-3	530-2	480-4	179-2	251-3	215-2	368-4	126-2	193-3	165-2	298-4	987-3	159-3	133-2	254-4	756-3	134-3	114-2	0.150	440-2	134-3	540-2	613-3	564-2	440-4	155-2	200-3	184-2	375-4	117-2	171-3	157-2	323-4	100-2	149-3	135-2	288-4	895-3	133-3	120-2	0.160	301-2	867-4	319-2	346-3	340-2	487-4	150-2	193-3	191-2	438-4	132-2	174-3	172-2	403-4	123-2	163-3	158-2	328-4	105-2	137-3	129-2	0.170	253-2	130-3	430-2	463-3	483-2	639-4	186-2	226-3	236-2	591-4	175-2	210-3	218-2	515-4	157-2	185-3	190-2	392-4	122-2	145-3	144-2	0.180	309-2	128-3	413-2	406-3	449-2	864-4	252-2	274-3	301-2	783-4	229-2	246-3	273-2	647-4	192-2	208-3	226-2	467-4	142-2	155-3	163-2	0.190	562-2	179-3	588-2	508-3	593-2	117-3	332-2	335-3	389-2	101-3	290-2	287-3	335-2	804-4	234-2	230-3	266-2	544-4	158-2	162-3	180-2	0.200	681-2	214-3	695-2	547-3	672-2	153-3	437-2	390-3	483-2	130-3	361-2	331-3	409-2	966-4	264-2	250-3	303-2	605-4	167-2	165-3	190-2	0.220	121-1	534-3	148-1	112-2	152-1	278-3	704-2	589-3	795-2	163-3	432-2	350-3	467-2	115-3	290-2	251-3	328-2	735-4	188-2	163-3	210-2	0.240	494-2	217-3	555-2	386-3	569-2	186-3	368-2	331-3	487-2	152-3	338-2	270-3	398-2	121-3	279-2	217-3	318-2	981-4	185-2	179-3	256-2	0.260	898-2	389-3	929-2	589-3	941-2	207-3	517-2	315-3	500-2	165-3	388-2	252-3	401-2	158-3	291-2	241-3	384-2	126-3	213-2	200-3	305-2	0.280	674-2	490-3	108-1	639-3	109-1	359-3	662-2	468-3	807-2	280-3	497-2	367-3	629-2	213-3	362-2	286-3	479-2	159-3	257-2	217-3	358-2	0.300	869-2	474-3	981-2	539-3	994-2	398-3	672-2	451-3	834-2	324-3	528-2	372-3	679-2	257-3	411-2	300-3	539-2	192-3	295-2	228-3	402-2	0.320	832-2	460-3	826-2	459-3	904-2	338-3	555-2	337-3	664-2	321-3	493-2	325-3	632-2	291-3	432-2	295-3	571-2	222-3	333-2	231-3	436-2	0.340	201-2	468-3	677-2	414-3	865-2	406-3	594-2	358-3	751-2	378-3	559-2	338-3	699-2	337-3	471-2	300-3	622-2	256-3	362-2	238-3	474-2	0.360	161-1	102-2	173-1	806-3	178-1	627-3	101-1	495-3	109-1	481-3	731-2	384-3	840-2	388-3	545-2	312-3	678-2	291-3	398-2	240-3	507-2	0.380	117-1	752-3	122-1	533-3	124-1	563-3	823-2	398-3	931-2	482-3	724-2	344-3	798-2	435-3	607-2	313-3	720-2	322-3	424-2	240-3	559-2	0.400	564-2	996-3	144-1	637-3	156-1	759-3	108-1	486-3	119-1	598-3	878-2	387-3	940-2	498-3	688-2	322-3	782-2	356-3	447-2	240-3	559-2	0.420	287-1	195-2	290-1	113-2	291-1	118-2	166-1	687-3	177-1	762-3	110-1	443-3	114-1	557-3	761-2	328-3	833-2	382-3	470-2	233-3	572-2	0.440	310-1	243-2	348-1	128-2	348-1	131-2	178-1	694-3	187-1	824-3	111-1	434-3	117-1	575-3	752-2	311-3	822-2	401-3	491-2	227-3	573-2	0.460	758-2	142-2	191-1	688-3	194-1	106-2	139-1	514-3	145-1	735-3	972-2	357-3	100-1	559-3	782-2	276-3	764-2	416-3	496-2	213-3	568-2	0.480	138-1	121-2	155-1	539-3	159-1	888-3	109-1	392-3	116-1	647-3	843-2	288-3	847-2	545-3	706-2	247-3	714-2	425-3	504-2	203-3	556-2	0.500	153-1	181-2	219-1	740-3	227-1	944-3	112-1	386-3	118-1	632-3	808-2	261-3	794-2	544-3	688-2	226-3	684-2	432-3	497-2	190-3	543-2	0.550	138-1	171-2	189-1	580-3	196-1	103-2	114-2	348-3	118-1	636-3	708-2	215-3	727-2	542-3	623-2	186-3	619-2	446-3	476-2	164-3	510-2	0.600	111-1	116-2	119-1	330-3	121-1	838-3	889-2	237-3	878-2	672-3	722-2	192-3	704-2	564-3	596-2	164-3	590-2	458-3	445-2	141-3	480-2	0.650	262-1	271-2	262-1	657-3	262-1	111-2	105-1	270-3	108-1	800-3	774-2	195-3	774-2	579-3	553-2	143-3	560-2	457-3	449-2	121-3	441-2	0.700	157-1	200-2	177-1	418-3	179-1	121-2	109-1	253-3	108-1	923-3	829-2	193-3	855-2	682-3	667-2	145-3	612-2	452-3	501-2	102-3	405-2

IIIG107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP N90E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT			
	FS	SD	SV	SA	FS	SD	SV	SA	FS	SD	SV	SA	FS	SD	SV	SA	FS	SD	SV	SA
0.75	699-2	126-2	118-1	230-3	106-1	981-3	978-2	178-3	822-2	845-3	775-2	154-3	708-2	722-3	653-2	133-3	605-2	527-3	526-2	103-3
0.80	111-1	181-2	134-1	289-3	142-1	152-2	121-1	244-3	120-1	124-2	969-2	200-3	977-2	896-3	706-2	145-3	703-2	605-3	536-2	104-3
0.85	407-1	559-2	412-1	791-3	413-1	278-2	204-1	394-3	205-1	167-2	127-1	238-3	123-1	102-2	789-2	148-3	761-2	679-3	538-2	105-3
0.90	150-1	336-2	235-1	424-3	234-1	231-2	170-1	292-3	161-1	161-2	123-1	205-3	112-1	108-2	811-2	141-3	758-2	745-3	571-2	103-3
0.95	119-1	340-2	209-1	385-3	224-1	255-2	161-1	290-3	169-1	173-2	125-1	198-3	114-1	119-2	876-2	138-3	792-2	813-3	591-2	985-4
1.00	121-1	378-2	237-1	387-3	238-1	246-2	157-1	252-3	155-1	178-2	121-1	183-3	112-1	125-2	871-2	131-3	791-2	887-3	605-2	976-4
1.10	291-1	524-2	298-1	443-3	299-1	321-2	187-1	272-3	183-1	224-2	132-1	191-3	128-1	153-2	910-2	132-3	877-2	100-2	605-2	930-4
1.20	986-2	260-2	137-1	185-3	136-1	202-2	120-1	144-3	106-1	168-2	102-1	120-3	881-2	140-2	807-2	103-3	737-2	107-2	595-2	859-4
1.30	170-1	353-2	170-1	214-3	170-1	230-2	119-1	139-3	111-1	178-2	953-2	108-3	860-2	149-2	791-2	928-4	723-2	113-2	653-2	780-4
1.40	218-1	485-2	218-1	253-3	218-1	257-2	117-1	134-3	115-1	176-2	930-2	925-4	791-2	150-2	827-2	807-4	676-2	116-2	684-2	689-4
1.50	851-2	236-2	990-2	107-3	989-2	191-2	953-2	872-4	803-2	169-2	898-2	774-4	710-2	146-2	820-2	684-4	615-2	115-2	700-2	596-4
1.60	678-2	210-2	914-2	841-4	827-4	181-2	888-2	726-4	713-2	162-2	852-2	651-4	637-2	142-2	793-2	581-4	560-2	114-2	699-2	512-4
1.70	824-2	262-2	967-2	927-4	968-2	192-2	821-2	683-4	712-2	159-2	798-2	571-4	590-2	138-2	761-2	502-4	511-2	113-2	689-2	446-4
1.80	780-2	267-2	938-2	843-4	932-2	190-2	764-2	600-4	663-2	151-2	747-2	482-4	529-2	135-2	730-2	436-4	472-2	128-2	677-2	444-4
1.90	679-2	308-2	946-2	874-4	102-1	228-2	815-2	647-4	755-2	184-2	712-2	525-4	611-2	168-2	705-2	487-4	556-2	146-2	665-2	457-4
2.00	841-2	375-2	117-1	960-4	117-1	283-2	943-2	724-4	889-2	249-2	790-2	641-4	782-2	210-2	690-2	552-4	661-2	165-2	656-2	469-4
2.20	633-2	459-2	127-1	971-4	131-1	405-2	108-1	858-4	115-1	343-2	869-2	731-4	982-2	274-2	676-2	591-4	782-2	197-2	642-2	465-4
2.40	178-1	683-2	178-1	121-3	178-1	464-2	113-1	826-4	121-1	370-2	920-2	662-4	968-2	291-2	737-2	533-4	763-2	211-2	626-2	419-4
2.60	188-1	954-2	240-1	144-3	230-1	639-2	159-1	968-4	154-1	429-2	105-1	652-4	103-1	277-2	819-2	434-4	669-2	210-2	617-2	361-4
2.80	191-1	855-2	192-1	111-2	192-1	556-2	128-1	726-4	124-1	388-2	102-1	509-4	871-2	270-2	871-2	355-4	606-2	200-2	678-2	304-4
3.00	118-1	565-2	118-1	642-4	118-1	403-2	684-2	458-4	844-2	355-2	930-2	405-4	744-2	291-2	845-2	336-4	610-2	206-2	702-2	258-4
3.20	352-2	401-2	934-2	400-4	787-2	381-2	850-2	381-4	749-2	352-2	839-2	355-4	692-2	306-2	801-2	314-4	602-2	231-2	706-2	249-4
3.40	569-2	374-2	758-2	331-4	691-2	367-2	774-2	326-4	679-2	352-2	783-2	315-4	651-2	319-2	771-2	292-4	590-2	250-2	706-2	245-4
3.60	735-2	430-2	786-2	339-4	751-2	382-2	767-2	302-4	667-2	368-2	774-2	294-4	643-2	336-2	764-2	277-4	587-2	265-2	707-2	239-4
3.80	773-2	494-2	857-2	350-4	817-2	427-2	811-2	303-4	706-2	403-2	801-2	289-4	667-2	360-2	776-2	267-4	595-2	279-2	709-2	230-4
4.00	721-2	538-2	898-2	344-4	845-2	488-2	815-2	312-4	767-2	447-2	843-2	288-4	702-2	386-2	796-2	259-4	607-2	289-2	711-2	220-4
4.20	701-2	647-2	106-1	375-4	969-2	551-2	932-2	319-4	824-2	492-2	881-2	286-4	737-2	411-2	813-2	248-4	616-2	301-2	711-2	208-4
4.40	855-2	777-2	123-1	410-4	111-1	629-2	103-1	332-4	898-2	544-2	900-2	288-4	777-2	444-2	818-2	237-4	635-2	335-2	705-2	195-4
4.60	110-1	900-2	128-1	435-4	123-1	750-2	110-1	363-4	102-1	593-2	906-2	288-4	810-2	475-2	807-2	235-4	649-2	370-2	691-2	199-4
4.80	130-1	101-1	138-1	449-4	132-1	833-2	119-1	370-4	109-1	634-2	965-2	283-4	830-2	497-2	802-2	228-4	650-2	404-2	669-2	201-4
5.00	141-1	115-1	143-1	474-4	145-1	866-2	125-1	354-4	108-1	704-2	998-2	289-4	885-2	547-2	845-2	233-4	687-2	434-2	668-2	202-4
5.50	131-1	120-1	149-1	407-4	137-1	103-1	125-1	351-4	118-1	840-2	106-1	287-4	959-2	636-2	868-2	226-4	727-2	491-2	712-2	196-4
6.00	102-1	111-1	131-1	315-4	116-1	924-2	114-1	262-4	968-2	773-2	942-2	223-4	809-2	663-2	841-2	201-4	694-2	512-2	728-2	180-4
6.50	861-2	105-1	119-1	254-4	101-1	930-2	107-1	225-4	899-2	783-2	918-2	191-4	757-2	632-2	811-2	167-4	611-2	501-2	718-2	157-4
7.00	770-2	920-2	106-1	192-4	826-2	832-2	100-1	174-4	747-2	721-2	929-2	153-4	648-2	580-2	818-2	130-4	521-2	466-2	688-2	134-4
7.50	643-2	768-2	103-1	139-4	644-2	680-2	988-2	124-4	570-2	620-2	923-2	115-4	519-2	537-2	828-2	103-4	450-2	418-2	682-2	112-4
8.00	471-2	666-2	965-2	106-4	523-2	629-2	931-2	100-4	494-2	579-2	862-2	942-5	454-2	510-2	809-2	900-5	401-2	414-2	688-2	933-5

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

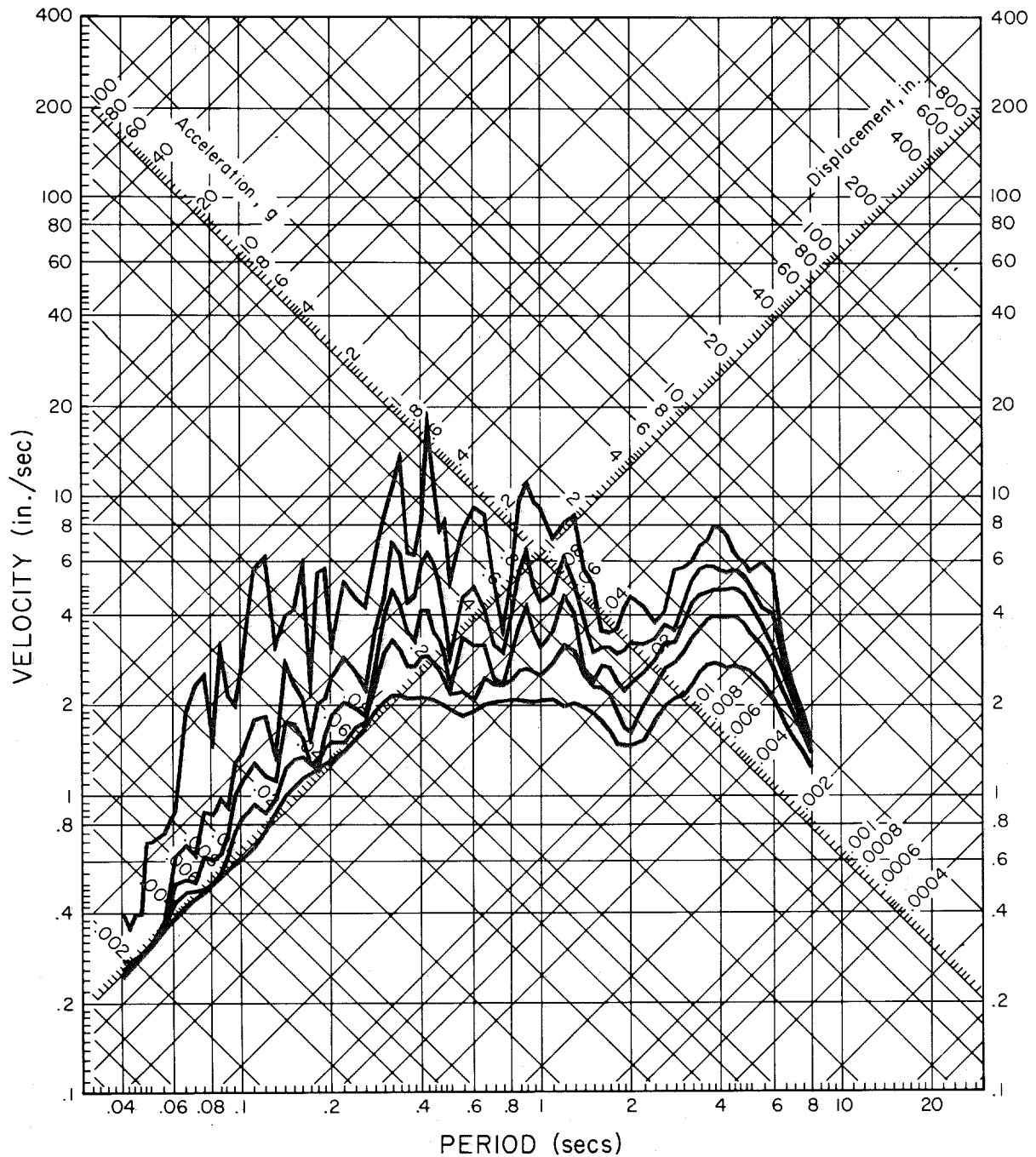


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

111G107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
 111G107 71.019.0 CALTECH ATHENAEUM, PASADENA, CAL. COMP DOWN

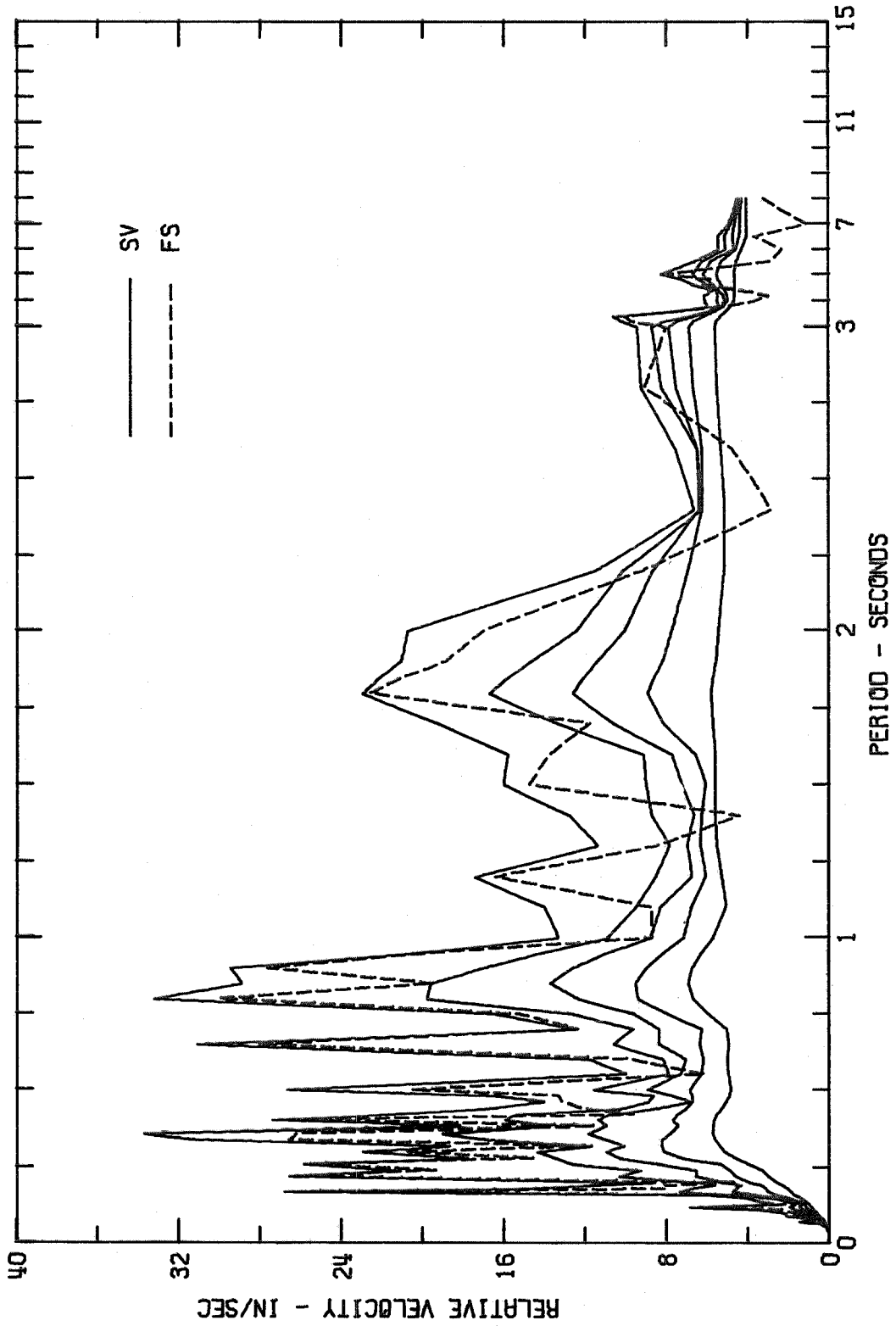
THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	180-3	262-5	272-3	167-3	412-3	184-5	942-4	118-3	290-3	171-5	671-4	109-3	269-3	166-5	578-4	107-3	262-3
0.042	112-3	247-5	170-3	143-3	370-3	191-5	850-4	111-3	286-3	188-5	671-4	108-3	281-3	184-5	617-4	107-3	276-3
0.044	323-3	288-5	344-3	152-3	412-3	206-5	953-4	109-3	295-3	206-5	710-4	108-3	294-3	203-5	657-4	107-3	290-3
0.046	162-3	302-5	256-3	146-3	413-3	223-5	106-3	108-3	305-3	223-5	830-4	108-3	305-3	222-5	761-4	107-3	303-3
0.048	373-3	551-5	532-3	244-3	722-3	243-5	149-3	107-3	318-3	243-5	103-3	107-3	318-3	242-5	867-4	107-3	317-3
0.050	413-3	577-5	654-3	236-3	725-3	263-5	189-3	108-3	331-3	264-5	123-3	108-3	332-3	264-5	101-3	108-3	331-3
0.055	683-3	680-5	720-3	229-3	776-3	346-5	269-3	117-3	395-3	331-5	208-3	111-3	378-3	333-5	158-3	113-3	381-3
0.060	560-3	887-5	844-3	252-3	929-3	622-5	351-3	177-3	651-3	499-5	234-3	141-3	522-3	434-5	200-3	123-3	454-3
0.065	129-2	203-4	190-2	491-3	196-2	731-5	611-3	176-3	706-3	560-5	357-3	136-3	541-3	508-5	253-3	123-3	491-3
0.070	223-2	270-4	240-2	564-3	242-2	726-5	559-3	152-3	652-3	591-5	397-3	122-3	530-3	552-5	316-3	117-3	495-3
0.075	201-2	314-4	260-2	571-3	263-2	109-4	838-3	199-3	918-3	772-5	564-3	140-3	647-3	599-5	395-3	109-3	502-3
0.080	916-3	204-4	152-2	326-3	160-2	114-4	803-3	183-3	895-3	798-5	557-3	128-3	626-3	670-5	419-3	107-3	526-3
0.085	263-2	434-4	312-2	615-3	321-2	137-4	947-3	194-3	101-2	898-5	623-3	125-3	663-3	771-5	436-3	110-3	570-3
0.090	726-3	318-4	210-2	402-3	222-2	135-4	778-3	171-3	947-3	112-4	660-3	142-3	785-3	948-5	555-3	121-3	662-3
0.095	336-3	312-4	187-2	354-3	266-2	203-4	116-2	230-3	134-2	158-4	908-3	179-3	105-2	119-4	678-3	138-3	792-3
0.100	288-3	444-4	261-2	454-3	279-2	227-4	121-2	233-3	143-2	184-4	993-3	191-3	116-2	138-4	751-3	146-3	871-3
0.110	484-2	104-3	588-2	886-3	598-2	325-4	167-2	272-3	185-2	234-4	114-2	199-3	133-2	170-4	834-3	149-3	976-3
0.120	573-2	125-3	646-2	891-3	657-2	364-4	193-2	260-3	190-2	231-4	124-2	163-3	121-2	173-4	827-3	127-3	910-3
0.130	226-2	675-4	302-2	409-3	326-2	291-4	133-2	175-3	140-2	241-4	959-3	146-3	116-2	210-4	813-3	127-3	101-2
0.140	234-2	923-4	405-2	482-3	414-2	644-4	268-2	334-3	289-2	407-4	161-2	211-3	183-2	286-4	104-2	150-3	128-2
0.150	337-2	103-3	436-2	471-3	434-2	582-4	235-2	264-3	243-2	429-4	162-2	198-3	180-2	328-4	111-2	153-3	137-2
0.160	487-2	156-3	595-2	624-3	613-2	553-4	210-2	221-3	217-2	411-4	152-2	164-3	161-2	357-4	109-2	142-3	140-2
0.170	106-2	661-4	242-2	234-3	244-2	435-4	157-2	154-3	160-2	361-4	121-2	127-3	133-2	360-4	102-2	130-3	133-2
0.180	347-2	165-3	566-2	523-3	579-2	600-4	191-2	190-3	209-2	362-4	126-2	113-3	126-2	388-4	102-2	124-3	135-2
0.190	544-2	180-3	593-2	511-3	597-2	663-4	214-2	188-3	219-2	502-4	136-2	142-3	166-2	453-4	112-2	131-3	150-2
0.200	747-3	104-3	299-2	266-3	327-2	821-4	231-2	212-3	258-2	613-4	158-2	160-3	192-2	499-4	123-2	133-3	156-2
0.220	464-2	188-3	522-2	398-3	538-2	105-3	296-2	219-3	300-2	743-4	200-2	160-3	212-2	546-4	142-2	119-3	156-2
0.240	403-2	181-3	452-2	322-3	475-2	103-3	221-2	183-3	270-2	778-4	177-2	137-3	203-2	674-4	153-2	120-3	176-2
0.260	286-2	182-3	439-2	276-3	441-2	967-4	213-2	146-3	233-2	792-4	169-2	122-3	191-2	760-4	155-2	116-3	183-2
0.280	346-2	294-3	623-2	383-3	660-2	165-3	347-2	216-3	372-2	124-3	229-2	161-3	279-2	107-3	168-2	142-3	240-2
0.300	880-2	429-3	888-2	488-3	900-2	227-3	412-2	258-3	475-2	196-3	320-2	222-3	411-2	148-3	226-2	172-3	311-2
0.320	753-2	574-3	111-1	573-3	112-1	371-3	644-2	372-3	730-2	256-3	447-2	258-3	504-2	174-3	302-2	177-3	343-2
0.340	130-1	764-3	139-1	676-3	141-1	359-3	644-2	320-3	664-2	242-3	430-2	214-3	448-2	171-3	297-2	154-3	317-2
0.360	602-2	385-3	670-2	304-3	672-2	262-3	644-2	206-3	458-2	209-3	356-2	165-3	365-2	160-3	276-2	129-3	280-2
0.380	389-2	402-3	700-2	285-3	665-2	289-3	522-2	203-3	478-2	205-3	376-2	147-3	365-2	169-3	294-2	122-3	281-2
0.400	485-2	556-3	882-2	355-3	874-2	394-3	619-2	252-3	618-2	274-3	435-2	177-3	431-2	192-3	323-2	123-3	302-2
0.420	183-1	124-2	185-1	721-3	186-1	452-3	657-2	262-3	676-2	287-3	439-2	166-3	430-2	203-3	330-2	118-3	303-2
0.440	810-2	822-3	115-1	434-3	117-1	432-3	616-2	229-3	617-2	254-3	376-2	134-3	363-2	201-3	310-2	108-3	287-2
0.460	168-2	587-3	781-2	283-3	802-2	387-3	524-2	186-3	529-2	250-3	356-2	122-3	342-2	197-3	290-2	967-4	270-2
0.480	780-2	663-3	849-2	294-3	867-2	309-3	450-2	137-3	404-2	228-3	324-2	101-3	299-2	189-3	265-2	869-4	248-2
0.500	344-2	427-3	580-2	174-3	536-2	237-3	338-2	972-4	298-2	187-3	256-2	773-4	235-2	179-3	237-2	754-4	225-2
0.550	727-2	705-3	802-2	238-3	805-2	416-3	457-2	141-3	476-2	305-3	340-2	103-3	349-2	201-3	230-2	693-4	230-2
0.600	874-2	916-3	973-2	260-3	560-2	493-3	550-2	139-3	516-2	314-3	327-2	898-4	329-2	206-3	225-2	599-4	216-2
0.650	888-2	939-3	898-2	227-3	908-2	449-3	441-2	108-3	434-2	340-3	326-2	829-4	329-2	264-3	248-2	658-4	256-2
0.700	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
0.750	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
0.800	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
0.850	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
0.900	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
0.950	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.000	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.050	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.100	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.150	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.200	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.250	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.300	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.350	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.400	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.450	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.500	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.550	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.600	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.650	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4	255-2	272-3	231-2	587-4	244-2
1.700	511-2	594-3	523-2	124-3	533-2	367-3	316-2	766-4	330-2	284-3	258-2	596-4					

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	293-2	440-3	346-2	800-4	368-2	371-3	293-2	677-4	311-2	292-3	250-2	534-4	244-2	289-3	232-2	542-4	242-2	256-3	182-2	524-4	214-2
0.80	552-2	705-3	553-2	112-3	553-2	525-3	407-2	840-4	412-2	390-3	315-2	626-4	306-2	321-3	237-2	531-4	252-2	275-3	184-2	499-4	216-2
0.85	943-2	138-2	993-2	195-3	102-1	786-3	567-2	111-3	581-2	523-3	361-2	742-4	386-2	367-3	239-2	532-4	271-2	292-3	193-2	473-4	216-2
0.90	749-2	165-2	113-1	209-3	115-1	985-3	685-2	124-3	688-2	637-3	447-2	808-4	445-2	395-3	280-2	512-4	275-2	306-3	184-2	446-4	213-2
0.95	979-2	150-2	986-2	170-3	997-2	786-3	546-2	891-4	520-2	547-3	394-2	623-4	361-2	407-3	271-2	472-4	269-2	322-3	210-2	423-4	213-2
1.00	950-2	151-2	951-2	154-3	951-2	732-3	483-2	748-4	460-2	517-3	355-2	531-4	324-2	416-3	269-2	435-4	261-2	341-3	221-2	407-4	214-2
1.10	617-2	132-2	765-2	111-3	754-2	864-3	525-2	731-4	493-2	644-3	370-2	548-4	368-2	505-3	305-2	442-4	288-2	379-3	241-2	378-4	216-2
1.20	536-2	162-2	887-2	115-3	851-2	124-2	701-2	885-4	652-2	920-3	517-2	656-4	482-2	631-3	358-2	455-4	330-2	393-3	267-2	331-4	206-2
1.30	656-2	187-2	919-2	113-3	504-2	109-2	539-2	662-4	529-2	866-3	391-2	528-4	418-2	650-3	345-2	401-4	314-2	435-3	282-2	280-4	210-2
1.40	571-2	131-2	608-2	686-4	590-2	895-3	388-2	467-4	401-2	611-3	360-2	321-4	274-2	582-3	331-2	314-4	261-2	455-3	284-2	257-4	204-2
1.50	466-2	125-2	549-2	571-4	526-2	746-3	335-2	339-4	312-2	596-3	324-2	273-4	249-2	570-3	308-2	269-4	239-2	464-3	278-2	236-4	194-2
1.60	487-3	936-3	299-2	374-4	367-2	825-3	284-2	330-4	324-2	717-3	288-2	288-4	281-2	605-3	285-2	251-4	237-2	468-3	270-2	215-4	183-2
1.70	151-2	982-3	349-2	347-4	363-2	878-3	319-2	311-4	324-2	750-3	279-2	267-4	277-2	609-3	269-2	223-4	225-2	462-3	262-2	192-4	170-2
1.80	334-2	106-2	406-2	336-4	371-2	885-3	354-2	279-4	308-2	710-3	299-2	224-4	247-2	560-3	257-2	184-4	195-2	443-3	255-2	168-4	154-2
1.90	388-2	133-2	477-2	371-4	440-2	958-3	360-2	271-4	317-2	703-3	276-2	200-4	232-2	531-3	248-2	151-4	175-2	462-3	251-2	147-4	152-2
2.00	358-2	152-2	441-2	390-4	479-2	106-2	352-2	273-4	335-2	783-3	291-2	201-4	246-2	539-3	244-2	142-4	169-2	485-3	248-2	140-4	152-2
2.20	399-2	155-2	470-2	329-4	445-2	116-2	382-2	246-4	332-2	931-3	300-2	198-4	265-2	724-3	270-2	155-4	206-2	555-3	249-2	135-4	158-2
2.40	221-2	150-2	491-2	266-4	392-2	131-2	434-2	234-4	345-2	112-2	373-2	201-4	294-2	914-3	307-2	169-4	239-2	702-3	250-2	139-4	183-2
2.60	108-2	178-2	417-2	269-4	431-2	159-2	386-2	242-4	386-2	138-2	345-2	211-4	335-2	114-2	292-2	177-4	276-2	853-3	246-2	141-4	206-2
2.80	584-2	262-2	583-2	342-4	589-2	165-2	371-2	215-4	370-2	150-2	293-2	197-4	337-2	128-2	250-2	171-4	288-2	974-3	241-2	140-4	218-2
3.00	557-2	286-2	617-2	326-4	600-2	216-2	439-2	246-4	453-2	186-2	358-2	213-4	390-2	149-2	275-2	176-4	313-2	106-2	244-2	136-4	223-2
3.20	472-2	321-2	621-2	321-4	631-2	276-2	535-2	276-4	542-2	232-2	434-2	234-4	456-2	177-2	365-2	184-4	349-2	124-2	290-2	133-4	243-2
3.40	648-2	382-2	706-2	338-4	706-2	319-2	618-2	283-4	590-2	262-2	539-2	233-4	485-2	201-2	443-2	181-4	372-2	145-2	328-2	139-4	268-2
3.60	732-2	424-2	775-2	335-4	740-2	348-2	657-2	275-4	608-2	283-2	603-2	224-4	494-2	229-2	489-2	186-4	401-2	162-2	353-2	141-4	283-2
3.80	737-2	501-2	830-2	355-4	829-2	365-2	709-2	258-4	604-2	306-2	619-2	218-4	506-2	249-2	504-2	182-4	411-2	173-2	361-2	139-4	287-2
4.00	764-2	517-2	821-2	330-4	813-2	373-2	692-2	239-4	586-2	321-2	604-2	206-4	504-2	260-2	468-2	171-4	409-2	180-2	356-2	133-4	283-2
4.20	684-2	513-2	780-2	297-4	768-2	387-2	643-2	225-4	580-2	338-2	568-2	197-4	507-2	273-2	447-2	159-4	408-2	185-2	338-2	123-4	277-2
4.40	681-2	478-2	682-2	252-4	682-2	411-2	567-2	217-4	588-2	359-2	511-2	191-4	512-2	289-2	433-2	157-4	412-2	196-2	321-2	118-4	280-2
4.60	528-2	470-2	645-2	227-4	642-2	426-2	557-2	206-4	582-2	369-2	532-2	180-4	505-2	296-2	445-2	148-4	405-2	203-2	328-2	116-4	277-2
4.80	385-2	477-2	666-2	211-4	624-2	430-2	615-2	191-4	563-2	371-2	550-2	166-4	486-2	296-2	461-2	137-4	388-2	210-2	335-2	112-4	275-2
5.00	380-2	463-2	661-2	189-4	582-2	417-2	611-2	171-4	524-2	360-2	548-2	149-4	452-2	288-2	463-2	122-4	362-2	214-2	345-2	107-4	270-2
5.20	624-2	547-2	625-2	185-4	625-2	384-2	522-2	130-4	439-2	337-2	480-2	115-4	385-2	285-2	421-2	993-5	326-2	216-2	335-2	926-5	246-2
5.50	680-2	544-2	570-2	154-4	570-2	399-2	514-2	113-4	418-2	307-2	472-2	879-5	321-2	264-2	415-2	792-5	276-2	208-2	333-2	760-5	217-2
6.00	569-2	335-2	517-2	811-5	523-2	298-2	494-2	724-5	288-2	271-2	462-2	669-5	262-2	234-2	415-2	591-5	226-2	189-2	344-2	610-5	183-2
6.50	323-2	267-2	462-2	557-5	239-2	254-2	449-2	533-5	228-2	238-2	429-2	511-5	214-2	215-2	398-2	486-5	193-2	179-2	344-2	488-5	160-2
7.00	101-2	236-2	406-2	429-5	198-2	227-2	401-2	435-5	190-2	216-2	392-2	407-5	181-2	200-2	374-2	403-5	168-2	173-2	336-2	411-5	145-2
7.50	537-3	206-2	360-2	330-5	162-2	200-2	360-2	321-5	157-2	193-2	358-2	320-5	151-2	183-2	350-2	330-5	144-2	165-2	327-2	356-5	129-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP NOOE
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

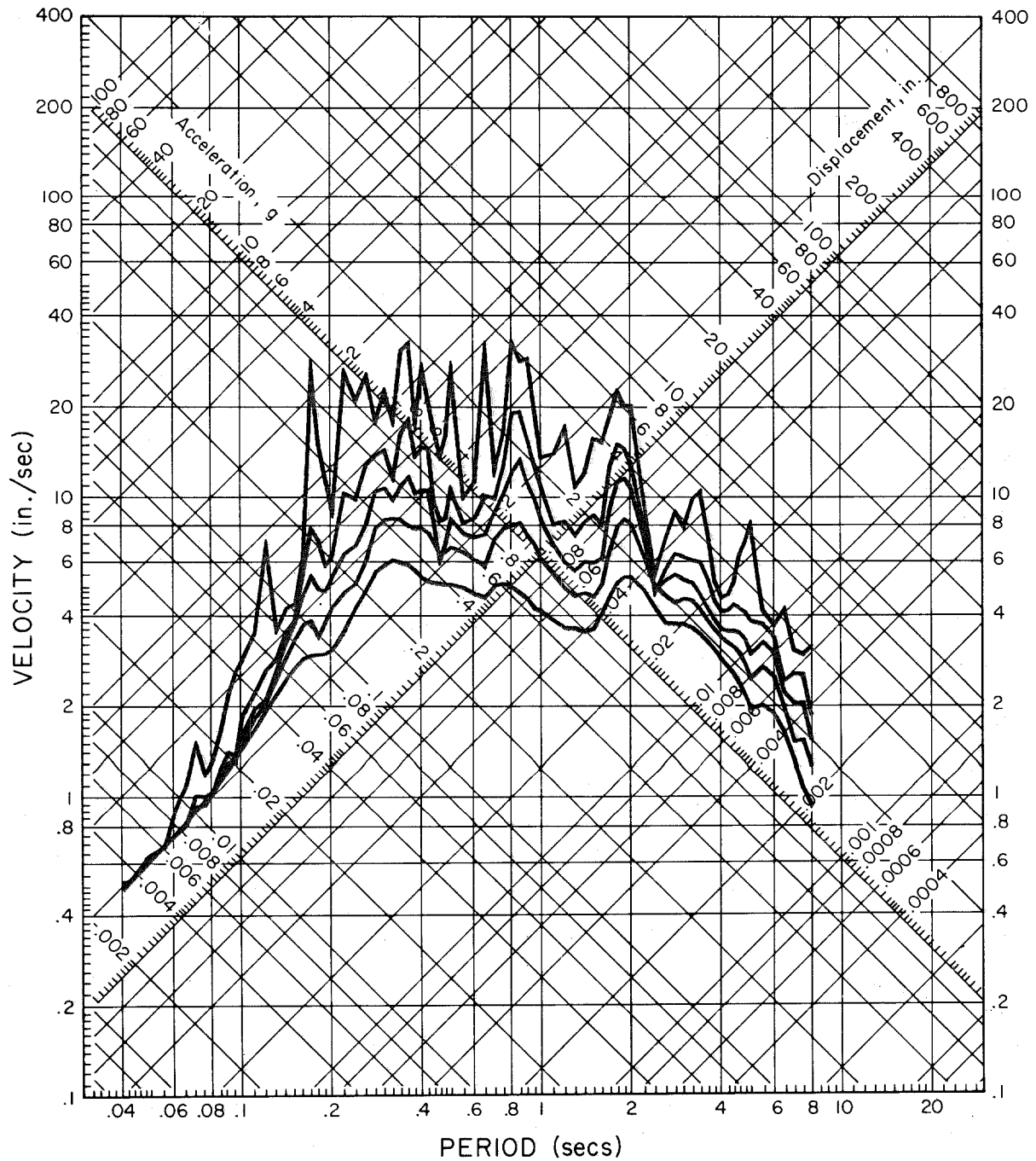


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP NOOE

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP NOOE

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	633-4	335-5	104-3	214-3	526-3	324-5	761-4	207-3	508-3	320-5	747-4	205-3	503-3	319-5	750-4	204-3	501-3
0.042	571-4	355-5	882-4	206-3	532-3	352-5	780-4	204-3	527-3	353-5	819-4	204-3	528-3	353-5	832-4	204-3	528-3
0.044	165-4	396-5	124-3	209-3	566-3	389-5	976-4	205-3	556-3	389-5	936-4	206-3	556-3	389-5	926-4	205-3	556-3
0.046	248-4	437-5	115-3	211-3	597-3	433-5	106-3	209-3	592-3	429-5	104-3	207-3	587-3	427-5	102-3	206-3	583-3
0.048	816-4	488-5	173-3	216-3	639-3	470-5	111-3	209-3	616-3	469-5	113-3	208-3	614-3	466-5	112-3	207-3	611-3
0.050	218-4	523-5	143-3	214-3	657-3	508-5	124-3	208-3	639-3	509-5	125-3	208-3	639-3	507-5	123-3	207-3	637-3
0.055	109-3	608-5	218-3	205-3	695-3	613-5	158-3	207-3	701-3	617-5	161-3	208-3	705-3	616-5	155-3	208-3	704-3
0.060	650-4	896-5	386-3	254-3	938-3	730-5	252-3	207-3	764-3	735-5	209-3	208-3	770-3	735-5	190-3	208-3	770-3
0.065	330-3	116-4	482-3	281-3	112-2	848-5	253-3	205-3	819-3	856-5	247-3	207-3	827-3	867-5	224-3	210-3	838-3
0.070	144-2	169-4	151-2	353-3	151-2	114-4	410-3	239-3	102-2	105-4	321-3	218-3	943-3	102-4	284-3	213-3	917-3
0.075	642-3	144-4	752-3	263-3	121-2	121-4	547-3	222-3	102-2	114-4	455-3	207-3	955-3	117-4	368-3	213-3	982-3
0.080	115-2	174-4	120-2	278-3	136-2	134-4	459-3	215-3	105-2	134-4	474-3	214-3	105-2	136-4	431-3	217-3	106-2
0.085	664-3	232-4	132-2	328-3	171-2	173-4	730-3	245-3	128-2	162-4	570-3	230-3	120-2	159-4	493-3	225-3	117-2
0.090	180-2	324-4	213-2	409-3	226-2	204-4	102-2	258-3	142-2	189-4	735-3	239-3	132-2	184-4	595-3	233-3	128-2
0.095	115-2	401-4	213-2	454-3	265-2	208-4	100-2	237-3	138-2	199-4	807-3	226-3	132-2	210-4	692-3	239-3	139-2
0.100	169-2	467-4	231-2	477-3	293-2	301-4	113-2	309-3	189-2	261-4	909-3	266-3	164-2	245-4	787-3	254-3	154-2
0.110	227-2	629-4	344-2	532-3	359-2	394-4	169-2	334-3	225-2	348-4	128-2	295-3	199-2	324-4	103-2	274-3	185-2
0.120	595-2	133-3	690-2	948-3	699-2	512-4	198-2	365-3	268-2	408-4	149-2	293-3	214-2	400-4	116-2	287-3	209-2
0.130	175-2	755-4	271-2	457-3	365-2	608-4	167-2	369-3	293-2	555-4	137-2	338-3	268-2	517-4	122-2	316-3	249-2
0.140	139-2	960-4	364-2	501-3	431-2	805-4	225-2	421-3	361-2	738-4	197-2	383-3	331-2	661-4	161-2	347-3	296-2
0.150	317-2	106-3	419-2	484-3	446-2	942-4	287-2	426-3	394-2	922-4	266-2	420-3	386-2	816-4	213-2	372-3	341-2
0.160	539-2	161-3	588-2	647-3	635-2	143-3	446-2	569-3	562-2	121-3	366-2	491-3	478-2	973-4	267-2	394-3	382-2
0.170	264-1	726-3	268-1	196-2	268-1	216-3	742-2	767-3	799-2	149-3	478-2	531-3	553-2	106-3	302-2	380-3	393-2
0.180	802-2	443-3	149-1	139-2	154-1	209-3	674-2	659-3	730-2	142-3	460-2	449-3	498-2	992-4	315-2	317-3	346-2
0.190	807-2	356-3	116-1	100-2	117-1	181-3	561-2	515-3	600-2	148-3	435-2	423-3	492-2	118-3	392-2	341-3	390-2
0.200	454-2	291-3	853-2	744-3	915-2	205-3	619-2	528-3	645-2	175-3	518-2	451-3	551-2	138-3	392-2	362-3	435-2
0.220	262-1	931-3	266-1	196-2	265-1	370-3	103-1	788-3	105-1	229-3	656-2	484-3	656-2	171-3	461-2	360-3	488-2
0.240	193-1	821-3	213-1	145-2	215-1	385-3	925-2	687-3	100-1	268-3	652-2	476-3	703-2	199-3	489-2	364-3	522-2
0.260	256-1	106-2	259-1	161-2	258-1	543-3	126-1	823-3	131-1	345-3	837-2	515-3	834-2	258-3	537-2	390-3	625-2
0.280	149-1	816-3	177-1	106-2	183-1	631-3	134-1	823-3	141-1	477-3	103-1	629-3	107-1	358-3	727-2	478-3	803-2
0.300	207-1	109-2	229-1	124-2	230-1	703-3	143-1	798-3	147-1	523-3	109-1	607-3	109-1	409-3	813-2	481-3	857-2
0.320	116-1	934-3	186-1	933-3	183-1	605-3	117-1	605-3	118-1	509-3	100-1	516-3	100-1	441-3	827-2	444-3	867-2
0.340	266-1	170-2	313-1	150-2	314-1	910-3	168-1	808-3	168-1	605-3	110-1	541-3	111-1	465-3	820-2	423-3	859-2
0.360	261-1	190-2	337-1	150-2	332-1	106-2	190-1	845-3	185-1	687-3	118-1	546-3	120-1	469-3	782-2	378-3	819-2
0.380	115-1	110-2	181-1	785-3	183-1	849-3	138-1	605-3	140-1	637-3	109-1	452-3	105-1	485-3	742-2	352-3	803-2
0.400	265-1	174-2	274-1	111-2	274-1	958-3	159-1	615-3	150-1	688-3	113-1	446-3	108-1	511-3	770-2	336-3	803-2
0.420	960-2	141-2	216-1	820-3	211-1	988-3	153-1	675-3	147-1	716-3	107-1	414-3	107-1	517-3	745-2	307-3	774-2
0.440	121-1	118-2	168-1	626-3	169-1	983-3	102-1	362-3	976-2	577-3	862-2	306-3	824-2	495-3	701-2	264-3	708-2
0.460	131-1	102-2	139-1	495-3	139-1	622-3	881-2	299-3	850-2	456-3	677-2	220-3	623-2	479-3	669-2	237-3	654-2
0.480	132-1	125-2	163-1	558-3	164-1	663-3	860-2	294-3	868-2	548-3	774-2	246-3	718-2	508-3	673-2	230-3	665-2
0.500	205-1	213-2	267-1	871-3	267-1	871-3	116-1	355-3	109-1	886-3	892-2	281-3	862-2	549-3	684-2	228-3	690-2
0.550	616-2	890-3	995-2	300-3	101-1	732-3	786-2	247-3	837-2	675-3	724-2	228-3	771-2	583-3	627-2	201-3	666-2
0.600	985-2	110-2	117-1	312-3	115-1	829-3	817-2	236-3	869-2	714-3	701-2	204-3	748-2	598-3	619-2	174-3	627-2
0.650	281-1	322-2	311-1	780-3	311-1	106-2	106-1	258-3	103-1	791-3	839-2	193-3	765-2	620-3	631-2	154-3	599-2
0.700	123-1	139-2	124-1	292-3	125-1	112-2	963-2	234-3	101-1	102-2	837-2	215-3	917-2	823-3	624-2	176-3	739-2

DAMPING = 0 PER CENT

DAMPING = 2 PER CENT

DAMPING = 5 PER CENT

DAMPING = 10 PER CENT

DAMPING = 20 PER CENT

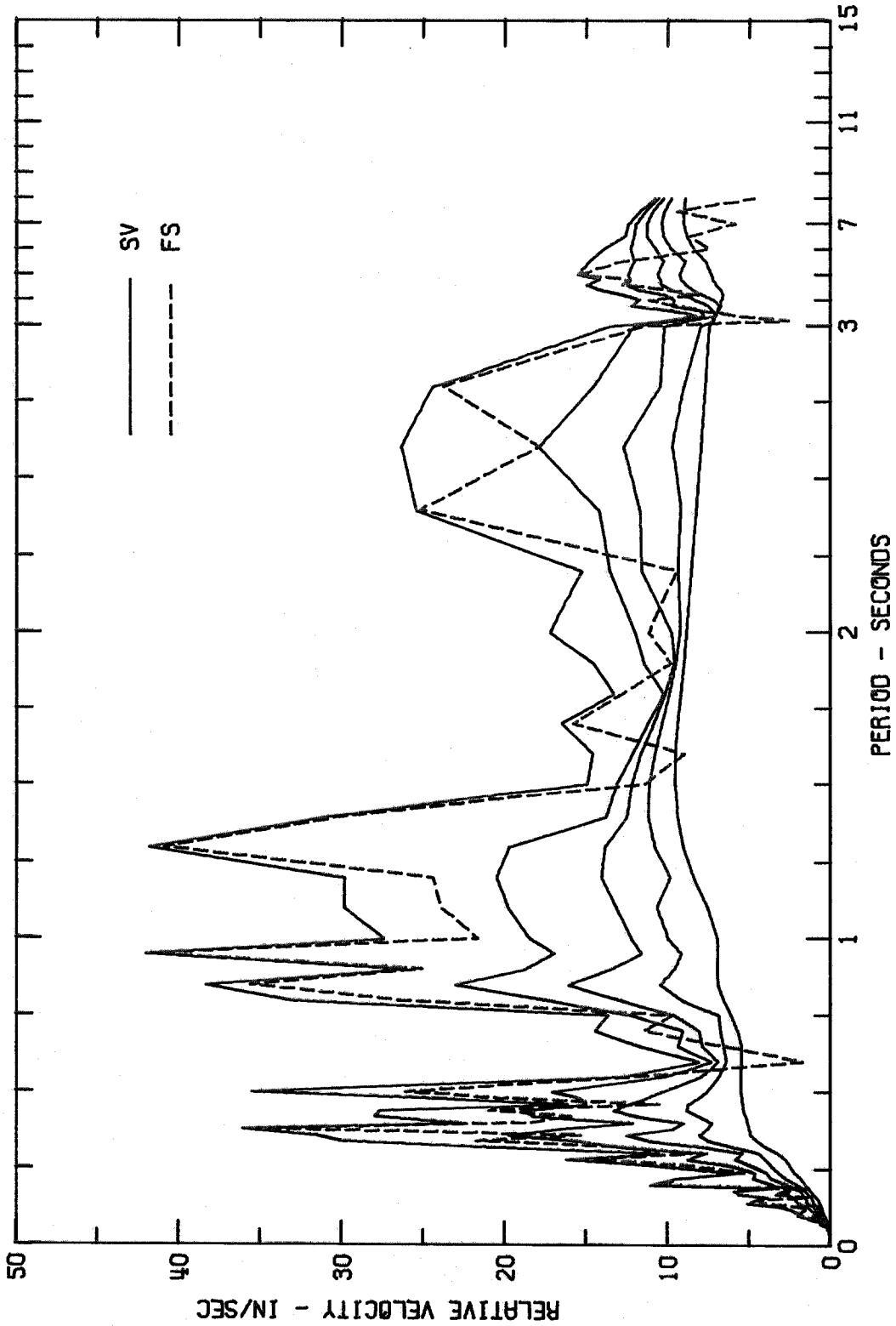
DAMPING = 20 PER CENT

IIIG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP NOOE

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	153-1	203-2	164-1	369-3	170-1	155-2	126-1	283-3	130-1	126-2	967-2	230-3	105-1	956-3	798-2	178-3	801-2	624-3	598-2	127-3	523-2
0.80	300-1	425-2	332-1	680-3	334-1	247-2	198-1	395-3	194-1	158-2	123-1	254-3	124-1	103-2	940-2	169-3	815-2	647-3	668-2	113-3	508-2
0.85	194-1	390-2	288-1	552-3	288-1	267-2	195-1	379-3	197-1	184-2	137-1	262-3	136-1	113-2	952-2	164-3	838-2	659-3	692-2	102-3	487-2
0.90	276-1	422-2	294-1	533-3	294-1	229-2	170-1	289-3	160-1	162-2	125-1	206-3	113-1	108-2	898-2	139-3	758-2	665-3	674-2	931-4	464-2
0.95	196-1	306-2	202-1	347-3	202-1	199-2	140-1	226-3	131-1	152-2	108-1	173-3	100-1	106-2	809-2	122-3	706-2	651-3	626-2	808-4	430-2
1.00	869-2	220-2	133-1	225-3	138-1	176-2	108-1	180-3	110-1	135-2	873-2	140-3	853-2	100-2	713-2	105-3	630-2	672-3	569-2	723-4	422-2
1.10	876-2	250-2	140-1	211-3	142-1	145-2	947-2	122-3	828-2	123-2	825-2	105-3	705-2	983-3	675-2	865-4	561-2	687-3	506-2	664-4	392-2
1.20	164-1	333-2	174-1	237-3	174-1	161-2	849-2	114-3	845-2	117-2	672-2	843-4	615-2	962-3	606-2	720-4	503-2	707-3	530-2	593-4	370-2
1.30	847-2	229-2	113-1	138-3	110-1	157-2	781-2	950-4	759-2	119-2	699-2	729-4	576-2	981-3	633-2	621-4	474-2	765-3	554-2	539-4	369-2
1.40	437-2	276-2	127-1	144-3	124-1	188-2	875-2	983-4	845-2	137-2	682-2	722-4	617-2	108-2	625-2	593-4	485-2	801-3	560-2	501-4	359-2
1.50	147-1	384-2	160-1	174-3	160-1	211-2	903-2	964-4	886-2	145-2	725-2	666-4	609-2	112-2	607-2	522-4	470-2	878-3	563-2	444-4	368-2
1.60	137-1	398-2	157-1	159-3	156-1	209-2	913-2	838-4	824-2	161-2	772-2	648-4	635-2	133-2	658-2	543-4	523-2	106-2	562-2	440-4	416-2
1.70	117-1	516-2	192-1	182-3	190-1	351-2	133-1	124-3	129-1	252-2	106-1	898-4	933-2	182-2	818-2	652-4	673-2	129-2	573-2	476-4	477-2
1.80	226-1	657-2	229-1	207-3	229-1	441-2	167-1	139-3	154-1	327-2	126-1	103-3	114-1	232-2	892-2	745-4	810-2	150-2	581-2	507-4	525-2
1.90	188-1	624-2	210-1	177-3	206-1	449-2	145-1	127-3	148-1	357-2	113-1	101-3	118-1	259-2	813-2	752-4	859-2	166-2	552-2	511-4	549-2
2.00	169-1	657-2	207-1	168-3	206-1	417-2	123-1	106-3	131-1	347-2	100-1	894-4	109-1	263-2	768-2	694-4	829-2	174-2	542-2	492-4	549-2
2.20	914-2	351-2	114-1	742-4	100-1	293-2	100-1	620-4	837-2	261-2	860-2	557-4	748-2	227-2	689-2	500-4	649-2	174-2	515-2	418-4	497-2
2.40	281-2	212-2	663-2	377-4	557-2	185-2	625-2	329-4	485-2	189-2	636-2	339-4	496-2	193-2	622-2	359-4	507-2	165-2	514-2	346-4	432-2
2.60	477-2	305-2	757-2	462-4	739-2	241-2	649-2	366-4	583-2	220-2	648-2	337-4	533-2	195-2	624-2	310-4	473-2	159-2	534-2	290-4	384-2
2.80	908-2	406-2	925-2	529-4	911-2	292-2	826-2	382-4	657-2	249-2	755-2	326-4	559-2	200-2	671-2	268-4	449-2	170-2	553-2	253-4	382-2
3.00	797-2	385-2	945-2	437-4	806-2	306-2	874-2	348-4	641-2	257-2	789-2	294-4	538-2	221-2	689-2	263-4	464-2	181-2	560-2	238-4	380-2
3.20	973-2	512-2	102-1	511-4	100-1	318-2	806-2	318-4	625-2	266-2	745-2	270-4	523-2	232-2	664-2	244-4	456-2	188-2	552-2	221-4	370-2
3.40	100-1	579-2	106-1	512-4	107-1	333-2	691-2	295-4	616-2	258-2	663-2	231-4	477-2	230-2	615-2	217-4	426-2	191-2	533-2	203-4	353-2
3.60	759-2	445-2	769-2	351-4	777-2	308-2	588-2	243-4	538-2	245-2	583-2	195-4	428-2	223-2	563-2	189-4	390-2	190-2	507-2	185-4	332-2
3.80	502-2	319-2	592-2	226-4	528-2	275-2	537-2	195-4	455-2	236-2	526-2	168-4	391-2	219-2	497-2	165-4	363-2	188-2	480-2	168-4	311-2
4.00	362-2	297-2	610-2	190-4	467-2	267-2	549-2	171-4	419-2	233-2	509-2	151-4	367-2	219-2	497-2	148-4	344-2	185-2	465-2	157-4	291-2
4.20	292-2	320-2	615-2	185-4	479-2	283-2	547-2	164-4	423-2	241-2	517-2	141-4	361-2	221-2	498-2	134-4	331-2	183-2	463-2	140-4	274-2
4.40	442-2	371-2	570-2	196-4	530-2	311-2	554-2	164-4	444-2	253-2	540-2	135-4	362-2	223-2	509-2	123-4	319-2	181-2	463-2	127-4	258-2
4.60	622-2	482-2	675-2	233-4	659-2	315-2	600-2	152-4	430-2	261-2	572-2	127-4	356-2	222-2	528-2	113-4	303-2	176-2	461-2	115-4	240-2
4.80	583-2	555-2	729-2	246-4	726-2	318-2	645-2	141-4	416-2	258-2	601-2	115-4	338-2	214-2	544-2	101-4	280-2	168-2	461-2	103-4	220-2
5.00	798-2	658-2	826-2	269-4	827-2	311-2	671-2	127-4	391-2	242-2	618-2	100-4	304-2	199-2	552-2	873-5	250-2	158-2	465-2	920-5	199-2
5.50	285-2	369-2	654-2	124-4	421-2	333-2	621-2	113-4	381-2	291-2	579-2	998-5	333-2	240-2	526-2	846-5	274-2	179-2	454-2	779-5	204-2
6.00	228-2	361-2	540-2	102-4	378-2	329-2	504-2	940-5	344-2	290-2	465-2	851-5	303-2	241-2	454-2	744-5	253-2	182-2	424-2	669-5	191-2
6.50	370-2	444-2	544-2	107-4	429-2	255-2	514-2	619-5	246-2	232-2	475-2	591-5	225-2	207-2	437-2	570-5	200-2	170-2	401-2	547-5	164-2
7.00	108-2	347-2	495-2	725-5	311-2	289-2	481-2	606-5	260-2	230-2	462-2	488-5	207-2	172-2	435-2	420-5	154-2	149-2	406-2	476-5	134-2
7.50	223-2	361-2	465-2	657-5	302-2	308-2	458-2	562-5	258-2	249-2	448-2	461-5	208-2	186-2	432-2	365-5	156-2	129-2	407-2	425-5	108-2
8.00	322-2	410-2	449-2	656-5	322-2	240-2	444-2	384-5	188-2	199-2	437-2	328-5	156-2	164-2	425-2	289-5	128-2	120-2	405-2	378-5	945-3

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP N90E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

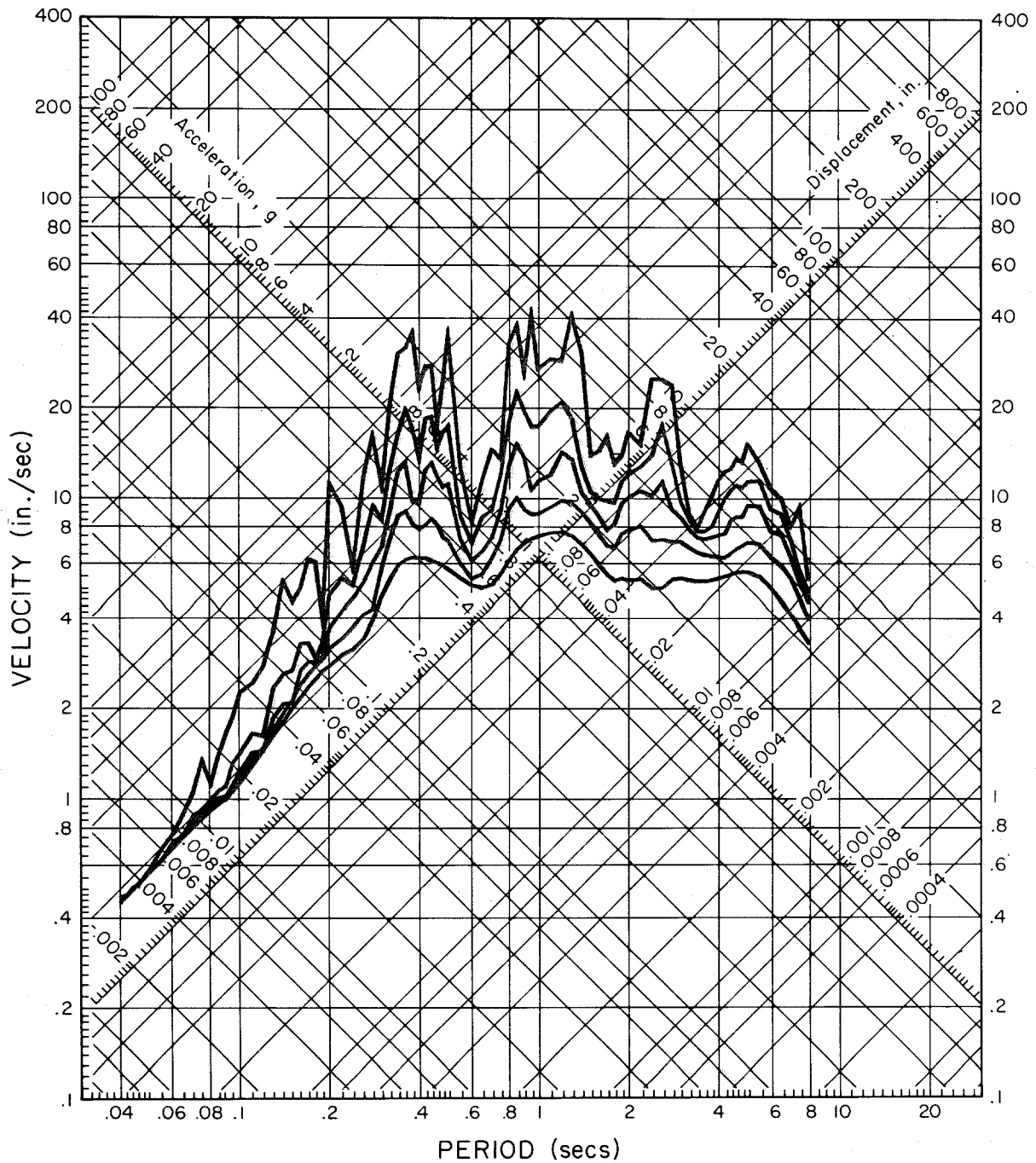


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP N90E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



IIIG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP N90E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT										DAMPING = 2 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV																
0.040	366-4	301-5	772-4	192-3	473-3	290-5	448-4	185-3	455-3	290-5	427-4	185-3	456-3	290-5	409-4	185-3	456-3	290-5	398-4	185-3	456-3	290-5	398-4	185-3	456-3	290-5	398-4	185-3	456-3	290-5	398-4	185-3	456-3																
0.042	153-4	321-5	603-4	186-3	481-3	322-5	505-4	186-3	481-3	321-5	468-4	186-3	480-3	321-5	445-4	186-3	480-3	320-5	437-4	186-3	480-3	320-5	437-4	186-3	480-3	320-5	437-4	186-3	480-3	320-5	437-4	186-3	480-3																
0.044	313-4	357-5	639-4	189-3	511-3	355-5	538-4	187-3	507-3	353-5	492-4	186-3	505-3	352-5	481-4	186-3	503-3	352-5	479-4	186-3	503-3	352-5	479-4	186-3	503-3	352-5	479-4	186-3	503-3	352-5	479-4	186-3	503-3																
0.046	327-4	381-5	790-4	184-3	521-3	384-5	603-4	185-3	525-3	385-5	552-4	186-3	526-3	385-5	535-4	186-3	527-3	385-5	530-4	186-3	527-3	385-5	530-4	186-3	527-3	385-5	530-4	186-3	527-3	385-5	530-4	186-3	527-3																
0.048	410-4	424-5	866-4	188-3	556-3	421-5	656-4	186-3	551-3	420-5	584-4	186-3	550-3	420-5	589-4	186-3	550-3	419-5	585-4	186-3	550-3	419-5	585-4	186-3	550-3	419-5	585-4	186-3	550-3	419-5	585-4	186-3	550-3																
0.050	380-4	468-5	102-3	191-3	588-3	457-5	692-4	187-3	575-3	457-5	640-4	186-3	574-3	457-5	648-4	186-3	574-3	456-5	640-4	186-3	574-3	456-5	640-4	186-3	574-3	456-5	640-4	186-3	574-3	456-5	640-4	186-3	574-3																
0.055	107-3	605-5	164-3	204-3	692-3	553-5	943-4	187-3	632-3	553-5	852-4	187-3	632-3	555-5	836-4	187-3	635-3	554-5	804-4	187-3	635-3	554-5	804-4	187-3	635-3	554-5	804-4	187-3	635-3	554-5	804-4	187-3	635-3																
0.060	121-3	744-5	198-3	211-3	779-3	696-5	151-3	198-3	729-3	678-5	125-3	192-3	710-3	670-5	104-3	190-3	702-3	662-5	988-4	188-3	702-3	662-5	988-4	188-3	702-3	662-5	988-4	188-3	702-3	662-5	988-4	188-3	702-3																
0.065	228-3	938-5	339-3	227-3	907-3	785-5	214-3	190-3	759-3	802-5	159-3	194-3	775-3	794-5	134-3	192-3	767-3	780-5	118-3	189-3	767-3	780-5	118-3	189-3	767-3	780-5	118-3	189-3	767-3	780-5	118-3	189-3	767-3																
0.070	580-3	119-4	640-3	249-3	107-2	987-5	253-3	206-3	886-3	940-5	191-3	196-3	844-3	920-5	161-3	193-3	826-3	903-5	140-3	189-3	826-3	903-5	140-3	189-3	826-3	903-5	140-3	189-3	826-3	903-5	140-3	189-3	826-3																
0.075	511-3	162-4	675-3	295-3	135-2	110-4	268-3	200-3	925-3	106-4	213-3	193-3	893-3	105-4	194-3	192-3	884-3	103-4	168-3	893-3	105-4	194-3	192-3	884-3	103-4	168-3	893-3	105-4	194-3	192-3	884-3	103-4	168-3																
0.080	203-3	143-4	407-3	229-3	112-2	128-4	316-3	204-3	100-2	124-4	264-3	198-3	975-3	119-4	236-3	192-3	942-3	117-4	195-3	942-3	117-4	195-3	942-3	117-4	195-3	942-3	117-4	195-3	942-3	117-4	195-3	942-3	117-4																
0.085	883-3	191-4	100-2	271-3	141-2	145-4	452-3	206-3	107-2	137-4	342-3	194-3	101-2	132-4	276-3	188-3	981-3	131-4	234-3	981-3	131-4	234-3	981-3	131-4	234-3	981-3	131-4	234-3	981-3	131-4	234-3	981-3																	
0.090	131-2	240-4	139-2	304-3	168-2	159-4	463-3	201-3	111-2	147-4	364-3	185-3	102-2	144-4	333-3	181-3	100-2	145-4	281-3	184-3	101-2	145-4	281-3	184-3	101-2	145-4	281-3	184-3	101-2	145-4	281-3	184-3	101-2																
0.095	113-2	290-4	159-2	329-3	192-2	201-4	870-3	228-3	133-2	171-4	590-3	194-3	113-2	163-4	441-3	185-3	107-2	161-4	330-3	183-3	107-2	161-4	330-3	183-3	107-2	161-4	330-3	183-3	107-2	161-4	330-3	183-3	107-2																
0.100	184-2	362-4	204-2	370-3	227-2	227-4	993-3	202-3	143-2	197-4	799-3	202-3	143-2	187-4	546-3	192-3	134-2	227-4	469-3	193-3	134-2	227-4	469-3	193-3	134-2	227-4	469-3	193-3	134-2	227-4	469-3	193-3	134-2																
0.110	195-2	428-4	205-2	362-3	244-2	290-4	993-3	245-3	166-2	251-4	830-3	212-3	143-2	236-4	648-3	199-3	134-2	227-4	469-3	193-3	134-2	227-4	469-3	193-3	134-2	227-4	469-3	193-3	134-2	227-4	469-3	193-3	134-2																
0.120	139-2	535-4	249-2	380-3	280-2	312-4	116-2	221-3	163-2	278-4	852-3	197-3	145-2	281-4	673-3	199-3	147-2	279-4	538-3	199-3	147-2	279-4	538-3	199-3	147-2	279-4	538-3	199-3	147-2	279-4	538-3	199-3	147-2																
0.130	186-2	761-4	319-2	460-3	367-2	491-4	149-2	296-3	237-2	389-4	104-2	235-3	188-2	357-4	766-3	216-3	172-2	339-4	596-3	207-3	172-2	339-4	596-3	207-3	172-2	339-4	596-3	207-3	172-2	339-4	596-3	207-3	172-2																
0.140	426-2	119-3	519-2	621-3	534-2	586-4	203-2	305-3	263-2	465-4	146-2	244-3	208-2	434-4	101-2	226-3	194-2	406-4	669-3	215-3	194-2	406-4	669-3	215-3	194-2	406-4	669-3	215-3	194-2	406-4	669-3	215-3	194-2																
0.150	444-2	108-3	452-2	494-3	455-2	644-4	216-2	291-3	269-2	503-4	148-2	228-3	210-2	513-4	112-2	234-3	215-2	482-4	764-3	222-3	215-2	482-4	764-3	222-3	215-2	482-4	764-3	222-3	215-2	482-4	764-3	222-3	215-2																
0.160	137-2	130-3	385-2	519-3	510-2	845-4	221-2	338-3	331-2	690-4	158-2	277-3	271-2	620-4	115-2	248-3	243-2	560-4	893-3	227-3	243-2	560-4	893-3	227-3	243-2	560-4	893-3	227-3	243-2	560-4	893-3	227-3	243-2																
0.170	349-2	171-3	572-2	606-3	633-2	903-4	280-2	321-3	334-2	786-4	172-2	280-3	290-2	715-4	135-2	255-3	264-2	645-4	105-2	233-3	264-2	645-4	105-2	233-3	264-2	645-4	105-2	233-3	264-2	645-4	105-2	233-3	264-2																
0.180	298-2	177-3	590-2	560-3	619-2	848-4	255-2	267-3	296-2	825-4	184-2	262-3	288-2	801-4	155-2	253-3	279-2	729-4	122-2	235-3	279-2	729-4	122-2	235-3	279-2	729-4	122-2	235-3	279-2	729-4	122-2	235-3	279-2																
0.190	144-2	121-3	349-2	343-3	401-2	102-3	264-2	290-3	338-2	910-4	215-2	257-3	301-2	899-4	174-2	257-3	297-2	817-4	138-2	237-3	297-2	817-4	138-2	237-3	297-2	817-4	138-2	237-3	297-2	817-4	138-2	237-3	297-2																
0.200	104-1	362-3	111-1	927-2	113-1	152-3	354-2	388-3	479-2	118-3	263-2	305-3	373-2	101-3	202-2	265-3	319-2	892-4	153-2	238-3	319-2	892-4	153-2	238-3	319-2	892-4	153-2	238-3	319-2	892-4	153-2	238-3	319-2																
0.220	923-2	334-3	940-2	706-3	954-2	191-3	475-2	405-3	547-2	150-3	368-2	318-3	428-2	120-3	276-2	256-3	344-2	106-3	184-2	231-3	344-2	106-3	184-2	231-3	344-2	106-3	184-2	231-3	344-2	106-3	184-2	231-3	344-2																
0.240	528-2	226-3	578-2	401-3	592-2	197-3	463-2	352-3	517-2	179-3	394-2	322-3	470-2	144-3	322-2	263-3	378-2	121-3	224-2	318-2	378-2	121-3	224-2	318-2	378-2	121-3	224-2	318-2	378-2	121-3	224-2	318-2	378-2																
0.260	874-2	497-3	108-1	151-3	120-1	292-3	620-2	441-3	706-2	219-3	495-2	333-3	530-2	172-3	368-2	263-3	416-2	142-3	250-2	344-2	416-2	142-3	250-2	344-2	416-2	142-3	250-2	344-2	416-2	142-3	250-2	344-2	416-2																
0.280	144-1	738-3	162-1	963-3	165-1	428-3	882-2	558-3	960-2	276-3	585																																						

IIITG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP N90E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

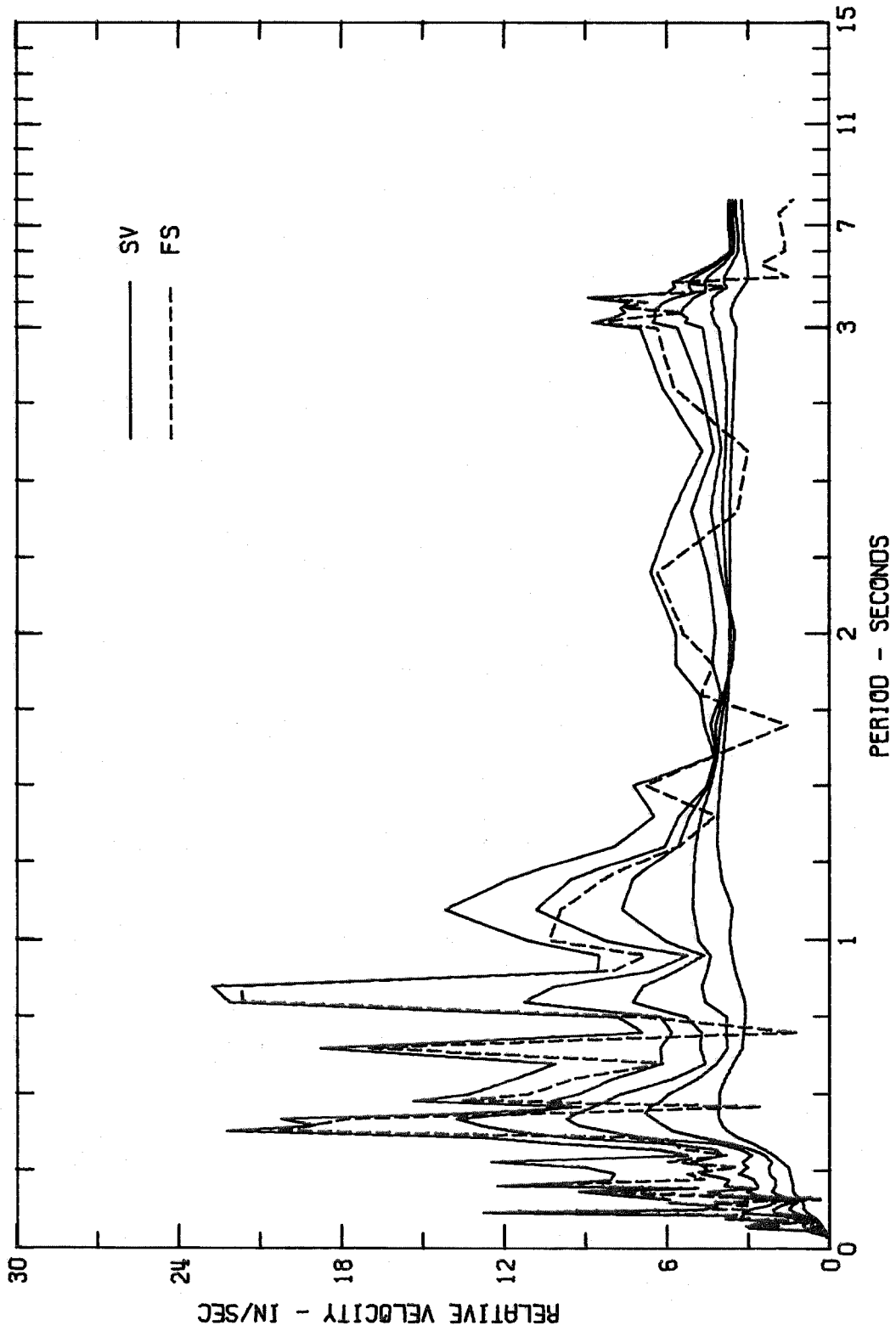
DAMPING = 0 PER CENT										DAMPING = 2 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV																
0.75	970-2	164-2	136-1	298-3	137-1	145-2	122-1	265-3	122-1	109-2	960-2	200-3	918-2	881-3	687-2	162-3	738-2	678-3	610-2	134-3	568-2																												
0.80	267-1	431-2	331-1	689-3	338-1	232-2	173-1	371-3	182-1	167-2	128-1	268-3	131-1	119-2	910-2	194-3	938-2	801-3	657-2	139-3	629-2																												
0.85	356-1	526-2	383-1	744-3	388-1	310-2	230-1	439-3	229-1	210-2	161-1	298-3	155-1	137-2	104-1	199-3	101-1	924-3	692-2	142-3	683-2																												
0.90	250-1	381-2	260-1	481-3	266-1	283-2	186-1	357-3	197-1	198-2	134-1	252-3	138-1	132-2	959-2	170-3	927-2	102-2	697-2	142-3	718-2																												
0.95	420-1	636-2	420-1	721-3	421-1	268-2	169-1	304-3	177-1	163-2	115-1	186-3	107-1	135-2	912-2	157-3	898-2	111-2	690-2	138-3	740-2																												
1.00	216-1	437-2	273-1	447-3	274-1	281-2	184-1	287-3	177-1	184-2	122-1	189-3	115-1	143-2	997-2	149-3	899-2	120-2	697-2	134-3	755-2																												
1.10	239-1	520-2	298-1	439-3	297-1	347-2	198-1	294-3	198-1	212-2	131-1	180-3	121-1	165-2	106-1	143-3	946-2	135-2	758-2	126-3	776-2																												
1.20	244-1	560-2	298-1	397-3	293-1	407-2	205-1	289-3	213-1	277-2	140-1	198-3	145-1	189-2	984-2	138-3	993-2	148-2	844-2	117-3	779-2																												
1.30	409-1	866-2	418-1	524-3	418-1	385-2	196-1	233-3	186-1	282-2	138-1	172-3	136-1	202-2	108-1	126-3	978-2	156-2	907-2	107-3	757-2																												
1.40	299-1	695-2	310-1	362-3	311-1	288-2	137-1	150-3	129-1	235-2	124-1	123-3	105-1	203-2	112-1	109-3	911-2	158-2	941-2	950-4	712-2																												
1.50	113-1	337-2	148-1	153-3	141-1	254-2	130-1	115-3	106-1	229-2	121-1	104-3	961-2	198-2	111-1	921-4	830-2	157-2	957-2	829-4	657-2																												
1.60	898-2	372-2	145-1	148-3	146-1	256-2	121-1	102-3	100-1	222-2	116-1	894-4	875-2	193-2	107-1	787-4	761-2	153-2	952-2	715-4	603-2																												
1.70	158-1	447-2	165-1	158-3	165-1	268-2	111-1	951-4	992-2	213-2	108-1	761-4	790-2	189-2	103-1	683-4	699-2	152-2	936-2	616-4	561-2																												
1.80	127-1	378-2	132-1	115-3	132-1	280-2	102-1	887-4	980-2	239-2	101-1	761-4	836-2	198-2	987-2	648-4	692-2	153-2	915-2	555-4	535-2																												
1.90	978-2	425-2	145-1	120-3	140-1	349-2	114-1	990-4	115-1	295-2	959-2	843-4	975-2	232-2	949-2	685-4	769-2	164-2	896-2	544-4	545-2																												
2.00	111-1	539-2	172-1	137-3	169-1	387-2	120-1	991-4	121-1	324-2	979-2	834-4	102-1	251-2	923-2	666-4	789-2	170-2	880-2	517-4	535-2																												
2.20	940-2	539-2	152-1	113-3	153-1	452-2	135-1	957-4	129-1	374-2	116-1	796-4	107-1	286-2	939-2	619-4	818-2	189-2	851-2	431-4	542-2																												
2.40	252-1	972-2	254-1	172-3	254-1	541-2	142-1	961-4	141-1	394-2	117-1	703-4	103-1	279-2	917-2	505-4	731-2	192-2	822-2	380-4	505-2																												
2.60	178-1	105-1	263-1	159-3	254-1	739-2	179-1	112-3	178-1	478-2	127-1	728-4	115-1	304-2	972-2	469-4	735-2	209-2	792-2	343-4	505-2																												
2.80	237-1	108-1	243-1	141-3	243-1	588-2	145-1	768-4	132-1	413-2	104-1	542-4	927-2	322-2	898-2	427-4	724-2	240-2	765-2	352-4	540-2																												
3.00	113-1	620-2	134-1	704-4	129-1	466-2	120-1	530-4	977-2	415-2	101-1	476-4	869-2	344-2	792-2	404-4	721-2	260-2	742-2	340-4	544-2																												
3.20	259-2	457-2	101-1	456-4	897-2	435-2	951-2	435-4	855-2	403-2	858-2	405-4	793-2	351-2	719-2	365-4	690-2	274-2	723-2	322-4	538-2																												
3.40	585-2	435-2	822-2	385-4	805-2	425-2	774-2	376-4	785-2	403-2	697-2	360-4	746-2	360-2	701-2	329-4	666-2	288-2	707-2	305-4	533-2																												
3.60	797-2	529-2	984-2	417-4	923-2	449-2	798-2	355-4	784-2	422-2	723-2	336-4	737-2	374-2	685-2	305-4	654-2	305-2	693-2	291-4	533-2																												
3.80	954-2	623-2	122-1	441-4	103-1	493-2	978-2	349-4	815-2	452-2	752-2	323-4	747-2	391-2	671-2	287-4	647-2	325-2	680-2	281-4	538-2																												
4.00	111-1	746-2	116-1	477-4	117-1	579-2	956-2	371-4	910-2	484-2	837-2	311-4	761-2	408-2	722-2	269-4	641-2	347-2	669-2	273-4	546-2																												
4.20	806-2	831-2	127-1	482-4	124-1	674-2	101-1	391-4	100-1	513-2	888-2	298-4	768-2	426-2	789-2	264-4	638-2	370-2	659-2	266-4	554-2																												
4.40	996-2	890-2	141-1	470-4	127-1	754-2	118-1	399-4	107-1	598-2	979-2	318-4	854-2	464-2	846-2	260-4	662-2	394-2	672-2	259-4	562-2																												
4.60	128-1	101-1	149-1	488-4	137-1	821-2	125-1	397-4	112-1	641-2	103-1	313-4	875-2	501-2	889-2	255-4	684-2	417-2	702-2	252-4	569-2																												
4.80	123-1	102-1	141-1	455-4	134-1	839-2	122-1	372-4	109-1	668-2	104-1	298-4	875-2	535-2	916-2	248-4	700-2	438-2	723-2	244-4	574-2																												
5.00	154-1	123-1	155-1	503-4	154-1	920-2	124-1	376-4	115-1	761-2	106-1	313-4	956-2	572-2	927-2	241-4	719-2	457-2	733-2	235-4	574-2																												
5.50	128-1	116-1	147-1	394-4	133-1	101-1	120-1	343-4	115-1	833-2	102-1	284-4	951-2	621-2	885-2	220-4	710-2	484-2	766-2	208-4	553-2																												
6.00	742-2	104-1	138-1	295-4	108-1	890-2	122-1	253-4	932-2	747-2	107-1	214-4	782-2	613-2	976-2	185-4	642-2	483-2	836-2	179-4	506-2																												
6.50	861-2	104-1	125-1	253-4	101-1	926-2	120-1	224-4	895-2	789-2	113-1	193-4	763-2	624-2	102-1	157-4	603-2	470-2	880-2	150-4	455-2																												
7.00	593-2	904-2	123-1	188-4	811-2	819-2	119-1	171-4	735-2	713-2	112-1	151-4	640-2	604-2	103-1	130-4	542-2	463-2	900-2	123-4	416-2																												
7.50	943-2	113-1	116-1	206-4	951-2	686-2	113-1	125-4	575-2	629-2	108-1	116-4	527-2	553-2	101-1	106-4	463-2	442-2	900-2	105-4	371-2																												
8.00	465-2	684-2	107-1	109-4	537-2	623-2	105-1	100-4	489-2	578-2	102-1	935-5	454-2	515-2	974-2	901-5	405-2	423-2	886-2	968-5	332-2																												

RELATIVE VELOCITY RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

1111G108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

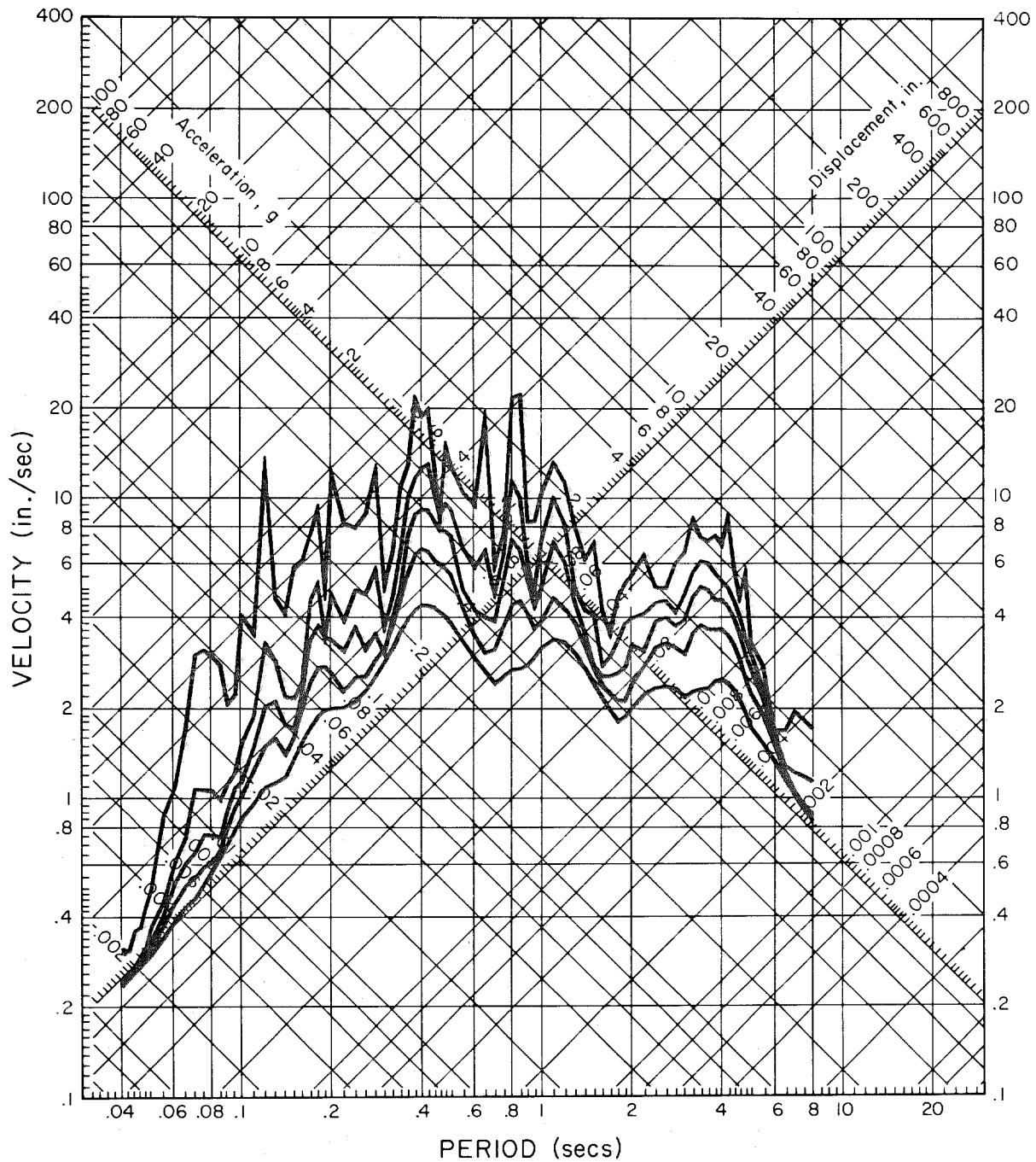


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG108 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



IIIIG1C8 71.022.0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

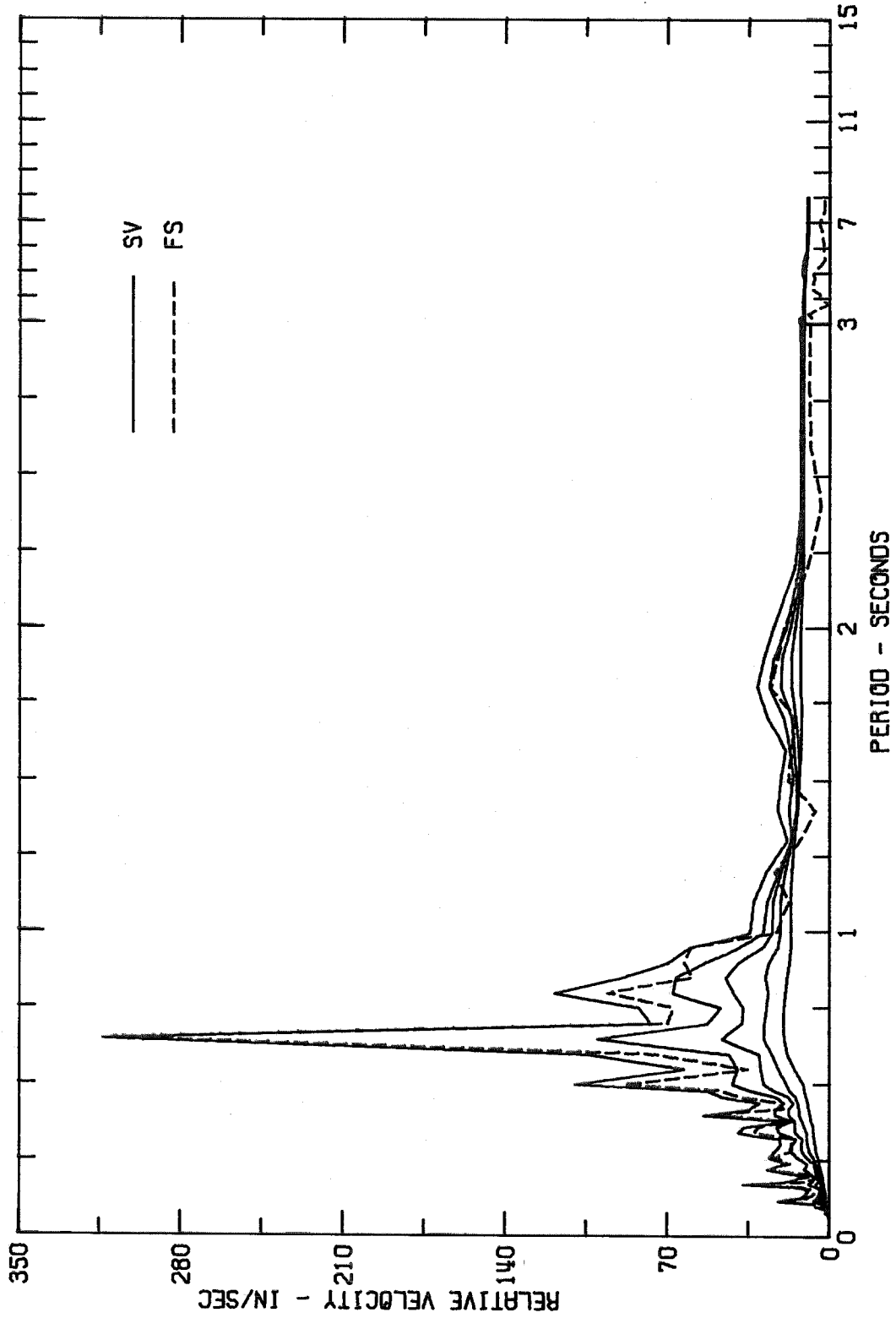
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	100-3	199-5	144-3	127-3	313-3	313-3	159-5	687-4	102-3	250-3	249-3	156-5	651-4	100-3	246-3	153-5	620-4
0.042	652-4	209-5	146-3	121-3	313-3	313-3	177-5	739-4	102-3	264-3	263-3	174-5	724-4	100-3	260-3	169-5	684-4
0.044	122-3	256-5	155-3	135-3	366-3	366-3	195-5	914-4	103-3	278-3	277-3	192-5	809-4	101-3	274-3	186-5	751-4
0.046	947-4	275-5	177-3	133-3	376-3	376-3	221-5	108-3	106-3	301-3	296-3	212-5	898-4	102-3	290-3	204-5	821-4
0.048	118-3	342-5	243-3	152-3	448-3	448-3	248-5	118-3	110-3	324-3	317-3	233-5	100-3	104-3	306-3	223-5	895-4
0.050	361-3	406-5	379-3	166-3	510-3	510-3	301-5	177-3	123-3	379-3	370-3	271-5	115-3	105-3	323-3	242-5	978-4
0.055	203-3	780-5	680-3	264-3	892-3	892-3	402-5	227-3	135-3	460-3	417-3	336-5	167-3	113-3	383-3	306-5	129-3
0.060	590-3	106-4	793-3	302-3	111-2	596-5	312-3	596-5	312-3	624-3	533-3	436-5	221-3	125-3	457-3	381-5	170-3
0.065	149-2	181-4	171-2	438-3	175-2	778-5	556-3	556-3	188-3	752-3	638-5	538-3	283-3	130-3	519-3	457-5	214-3
0.070	291-2	341-4	300-2	713-3	306-2	121-4	942-3	942-3	253-3	109-2	747-5	617-5	348-3	130-3	553-3	526-5	250-3
0.075	188-2	378-4	310-2	689-3	317-2	130-4	101-2	238-3	109-2	922-5	773-3	717-5	617-5	130-3	600-3	630-5	278-3
0.080	287-2	384-4	301-2	615-3	302-2	137-4	936-3	936-3	218-3	107-2	972-5	763-3	788-5	126-3	619-3	746-5	319-3
0.085	172-2	381-4	267-2	540-3	282-2	136-4	101-2	193-3	100-2	102-4	755-3	926-5	462-3	132-3	684-3	875-5	358-3
0.090	925-3	303-4	180-2	383-3	211-2	164-4	801-3	207-3	114-2	135-4	946-3	117-4	505-3	149-3	823-3	103-4	410-3
0.095	155-2	344-4	200-2	390-3	228-2	189-4	854-3	214-3	125-2	166-4	693-3	110-2	143-4	164-3	948-3	120-4	460-3
0.100	333-2	658-4	387-2	673-3	413-2	247-4	122-2	252-3	155-2	184-4	872-3	115-2	165-4	172-3	103-2	138-4	521-3
0.110	323-2	628-4	347-2	531-3	358-2	339-4	180-2	288-3	193-2	267-4	135-2	222-4	100-2	190-3	127-2	172-4	707-3
0.120	118-1	245-3	128-1	174-2	128-1	638-4	324-2	451-3	334-2	395-4	216-2	292-4	130-2	206-3	153-2	212-4	846-3
0.130	308-2	977-4	464-2	591-3	472-2	604-4	296-2	367-3	292-2	448-4	212-2	334-4	151-2	202-3	161-2	238-4	974-3
0.140	305-2	933-4	411-2	486-3	418-2	497-4	230-2	258-3	223-2	400-4	180-2	319-4	142-2	170-3	143-2	268-4	985-3
0.150	431-2	144-3	594-2	657-3	605-2	528-4	200-2	241-3	221-2	418-4	142-2	393-4	118-2	180-3	164-2	333-4	100-2
0.160	331-3	163-3	593-2	651-3	640-2	642-4	208-2	256-3	252-2	592-4	174-2	520-4	148-2	210-3	204-2	406-4	110-2
0.170	553-2	211-3	766-2	747-3	780-2	127-3	407-2	453-3	471-2	933-4	277-2	678-4	193-2	243-3	250-2	480-4	126-2
0.180	897-2	269-3	927-2	852-3	942-2	152-3	451-2	483-3	532-2	109-3	307-2	796-4	213-2	253-3	278-2	553-4	136-2
0.190	488-2	155-3	494-2	439-3	512-2	106-3	273-2	300-3	350-2	105-3	349-2	850-4	209-2	243-3	281-2	610-4	140-2
0.200	117-1	392-3	123-1	100-2	123-1	155-3	390-2	396-3	487-2	109-3	266-2	848-4	199-2	225-3	266-2	651-4	135-2
0.220	463-2	295-3	806-2	623-3	842-2	139-3	370-2	294-3	397-2	110-3	280-2	820-4	201-2	175-3	234-2	722-4	143-2
0.240	526-2	312-3	793-2	554-3	817-2	193-3	475-2	345-3	506-2	145-3	338-2	988-4	223-2	174-3	258-2	825-4	148-2
0.260	346-2	379-3	902-2	573-3	915-2	203-3	455-2	309-3	491-2	131-3	304-2	107-3	225-2	162-3	260-2	972-4	153-2
0.280	599-2	567-3	125-1	740-3	127-1	264-3	511-2	344-3	594-2	160-3	322-2	208-3	359-2	175-3	295-2	116-3	177-2
0.300	379-2	247-3	521-2	281-3	519-2	179-3	398-2	203-3	376-2	147-3	285-2	153-3	308-2	177-3	321-2	138-3	207-2
0.320	550-2	348-3	636-2	348-3	684-2	246-3	419-2	247-3	483-2	207-3	331-2	194-3	292-2	196-3	382-2	165-3	245-2
0.340	574-2	608-3	103-1	538-3	112-1	367-3	604-2	326-3	679-2	275-3	422-2	253-3	373-2	226-3	468-2	198-3	288-2
0.360	762-2	766-3	127-1	605-3	133-1	595-3	954-2	469-3	103-1	445-3	692-2	333-3	479-2	265-3	582-2	231-3	340-2
0.380	204-1	134-2	222-1	949-3	221-1	726-3	117-1	513-3	120-1	546-3	823-2	401-3	579-2	287-3	664-2	262-3	378-2
0.400	189-1	122-2	189-1	784-3	192-1	826-3	129-1	530-3	129-1	598-3	931-2	441-3	616-2	287-3	693-2	286-3	396-2
0.420	177-1	136-2	202-1	790-3	204-1	891-3	137-1	518-3	133-1	625-3	972-2	454-3	652-2	269-3	679-2	299-3	409-2
0.440	948-2	930-3	133-1	491-3	132-1	759-3	115-1	402-3	108-1	598-3	930-2	445-3	681-2	241-3	636-2	310-3	411-2
0.460	254-2	645-3	917-2	312-3	881-2	658-3	968-2	318-3	898-2	582-3	868-2	449-3	664-2	220-3	614-2	311-3	409-2
0.480	135-1	117-2	154-1	520-3	153-1	749-3	102-1	332-3	980-2	607-3	819-2	457-3	618-2	207-3	598-2	313-3	405-2
0.500	110-1	105-2	133-1	432-3	132-1	747-3	929-2	306-3	939-2	609-3	772-2	451-3	595-2	190-3	567-2	309-3	410-2
0.550	945-2	933-3	115-1	315-3	106-1	606-3	757-2	205-3	693-2	442-3	576-2	150-3	484-2	134-3	437-2	296-3	385-2
0.600	614-2	924-3	100-1	262-3	967-2	576-3	619-2	164-3	604-2	412-3	456-2	117-3	415-2	999-4	355-2	284-3	354-2
0.650	170-1	194-2	188-1	471-3	188-1	710-3	624-2	172-3	687-2	424-3	478-2	102-3	377-2	798-4	311-2	279-3	322-2
0.700	122-2	676-3	688-2	141-3	607-2	546-3	579-2	113-3	490-2	442-3	473-2	356-3	382-2	755-4	319-2	275-3	316-2

IIIG108 71.022-0 CALTECH MILLIKAN LIBRARY, BASEMENT, PASADENA, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT																	
0.75	687-2	945-2	784-2	171-3	792-2	792-2	792-3	626-2	144-3	663-2	652-3	528-2	119-3	546-2	457-3	378-2	845-4
0.80	216-1	283-2	221-1	452-3	222-1	148-2	113-1	138-2	113-1	116-1	946-3	727-2	151-3	743-2	576-3	460-2	936-4
0.85	217-1	308-2	227-1	436-3	228-1	138-2	101-1	196-3	102-1	102-1	927-3	689-2	131-3	685-2	628-3	473-2	908-4
0.90	796-2	122-2	853-2	154-3	853-2	918-3	654-2	116-3	641-2	781-3	563-2	990-4	545-2	545-2	602-3	451-2	779-4
0.95	680-2	129-2	850-2	146-3	857-2	754-3	522-2	855-4	498-2	498-2	671-3	464-2	767-4	444-2	566-3	438-2	657-4
1.00	103-1	168-2	111-1	172-3	106-1	117-2	827-2	120-3	739-2	820-3	606-2	842-4	515-2	515-2	630-3	484-2	657-4
1.10	990-2	235-2	142-1	198-3	134-1	180-2	108-1	152-3	102-1	102-1	127-2	767-2	108-3	728-2	833-3	506-2	723-4
1.20	828-2	218-2	118-1	155-3	114-1	158-2	951-2	112-3	829-2	119-2	724-2	852-4	624-2	624-2	839-3	502-2	623-4
1.30	551-2	168-2	790-2	102-3	815-2	104-2	605-2	634-4	506-2	937-3	556-2	571-4	453-2	453-2	806-3	494-2	510-4
1.40	420-2	142-2	647-2	745-4	641-2	964-3	552-2	503-4	432-2	807-3	513-2	424-4	362-2	362-2	728-3	471-2	397-4
1.50	680-2	173-2	723-2	787-4	725-2	991-3	452-2	451-4	415-2	670-3	445-2	307-4	280-2	280-2	656-3	436-2	310-4
1.60	422-2	109-2	427-2	436-4	429-2	720-3	418-2	288-4	282-2	664-3	419-2	267-4	260-2	260-2	622-3	413-2	257-4
1.70	154-2	968-3	462-2	342-4	358-2	824-3	438-2	339-2	311-4	344-2	764-3	390-2	243-4	266-2	623-3	383-2	203-4
1.80	474-2	137-2	479-2	433-4	479-2	985-3	117-2	434-2	434-2	333-4	842-3	357-2	239-4	278-2	655-3	368-2	189-4
1.90	429-2	160-2	568-2	455-4	531-2	175-2	512-2	311-4	458-2	150-2	439-2	270-4	395-2	395-2	123-2	396-2	231-4
2.00	538-2	181-2	568-2	463-4	568-2	128-2	421-2	329-4	404-2	105-2	350-2	271-4	329-2	329-2	779-3	365-2	206-4
2.20	636-2	231-2	660-2	489-4	661-2	147-2	448-2	312-4	421-2	110-2	404-2	236-4	316-2	316-2	987-3	385-2	219-4
2.40	338-2	196-2	577-2	349-4	515-2	175-2	512-2	311-4	458-2	150-2	439-2	270-4	395-2	395-2	123-2	396-2	231-4
2.60	301-2	212-2	469-2	320-4	512-2	192-2	428-2	291-4	465-2	168-2	400-2	256-4	407-2	407-2	138-2	382-2	212-4
2.80	575-2	277-2	616-2	362-4	622-2	188-2	474-2	246-4	424-2	170-2	434-2	225-4	383-2	383-2	144-2	410-2	172-4
3.00	638-2	322-2	701-2	367-4	676-2	235-2	563-2	267-4	492-2	191-2	468-2	218-4	400-2	400-2	147-2	410-2	172-4
3.20	862-2	446-2	876-2	445-4	876-2	296-2	653-2	296-4	582-2	244-2	532-2	245-4	480-2	480-2	184-2	425-2	188-4
3.40	711-2	410-2	794-2	362-4	757-2	342-2	642-2	303-4	633-2	280-2	523-2	249-4	518-2	518-2	208-2	431-2	189-4
3.60	541-2	422-2	752-2	333-4	736-2	355-2	644-2	280-4	620-2	289-2	550-2	230-4	505-2	505-2	213-2	435-2	174-4
3.80	763-2	464-2	770-2	328-4	767-2	347-2	637-2	246-4	575-2	283-2	539-2	202-4	469-2	469-2	224-2	426-2	165-4
4.00	671-2	452-2	739-2	289-4	711-2	345-2	608-2	221-4	543-2	297-2	515-2	191-4	467-2	467-2	237-2	437-2	157-4
4.20	873-2	591-2	892-2	342-4	884-2	343-2	561-2	199-4	513-2	296-2	496-2	173-4	444-2	444-2	238-2	429-2	143-4
4.40	497-2	417-2	594-2	220-4	556-2	325-2	495-2	172-4	464-2	283-2	459-2	151-4	404-2	404-2	230-2	408-2	127-4
4.60	384-2	346-2	568-2	167-4	473-2	298-2	518-2	144-4	408-2	260-2	455-2	126-4	356-2	356-2	215-2	377-2	108-4
4.80	570-2	442-2	576-2	196-4	578-2	264-2	517-2	117-4	346-2	233-2	461-2	104-4	305-2	305-2	195-2	387-2	911-5
5.00	150-2	268-2	527-2	109-4	337-2	246-2	494-2	101-4	310-2	219-2	449-2	905-5	275-2	275-2	181-2	387-2	784-5
5.50	251-2	245-2	424-2	829-5	280-2	208-2	410-2	708-5	238-2	192-2	389-2	668-5	220-2	220-2	169-2	357-2	616-5
6.00	162-2	164-2	363-2	468-5	172-2	159-2	358-2	456-5	167-2	156-2	351-2	461-5	163-2	163-2	147-2	335-2	479-5
6.50	169-2	178-2	366-2	431-5	172-2	135-2	358-2	334-5	130-2	129-2	348-2	356-5	125-2	125-2	129-2	334-2	413-5
7.00	179-2	222-2	374-2	465-5	200-2	139-2	366-2	290-5	124-2	119-2	356-2	290-5	107-2	107-2	118-2	341-2	353-5
7.50	180-2	222-2	374-2	404-5	186-2	144-2	368-2	262-5	120-2	114-2	358-2	235-5	955-3	955-3	114-2	345-2	302-5
8.00	134-2	223-2	370-2	357-5	175-2	148-2	365-2	236-5	116-2	116-2	357-2	200-5	913-3	913-3	113-2	345-2	260-5

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
1111G109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP NOOE
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

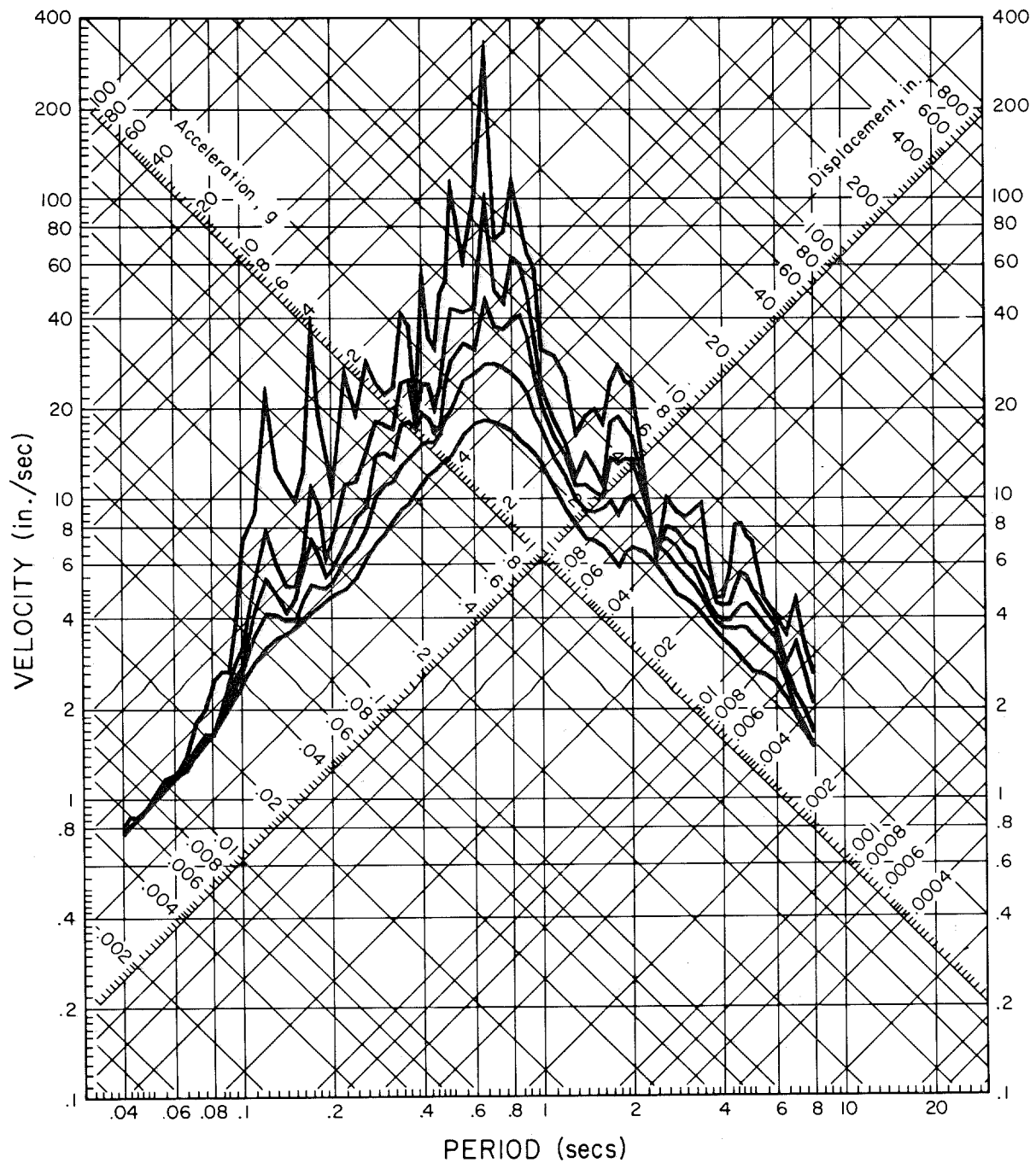


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP NODE

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
 111G109 71.023.0 CALTECH WILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP NOOE

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

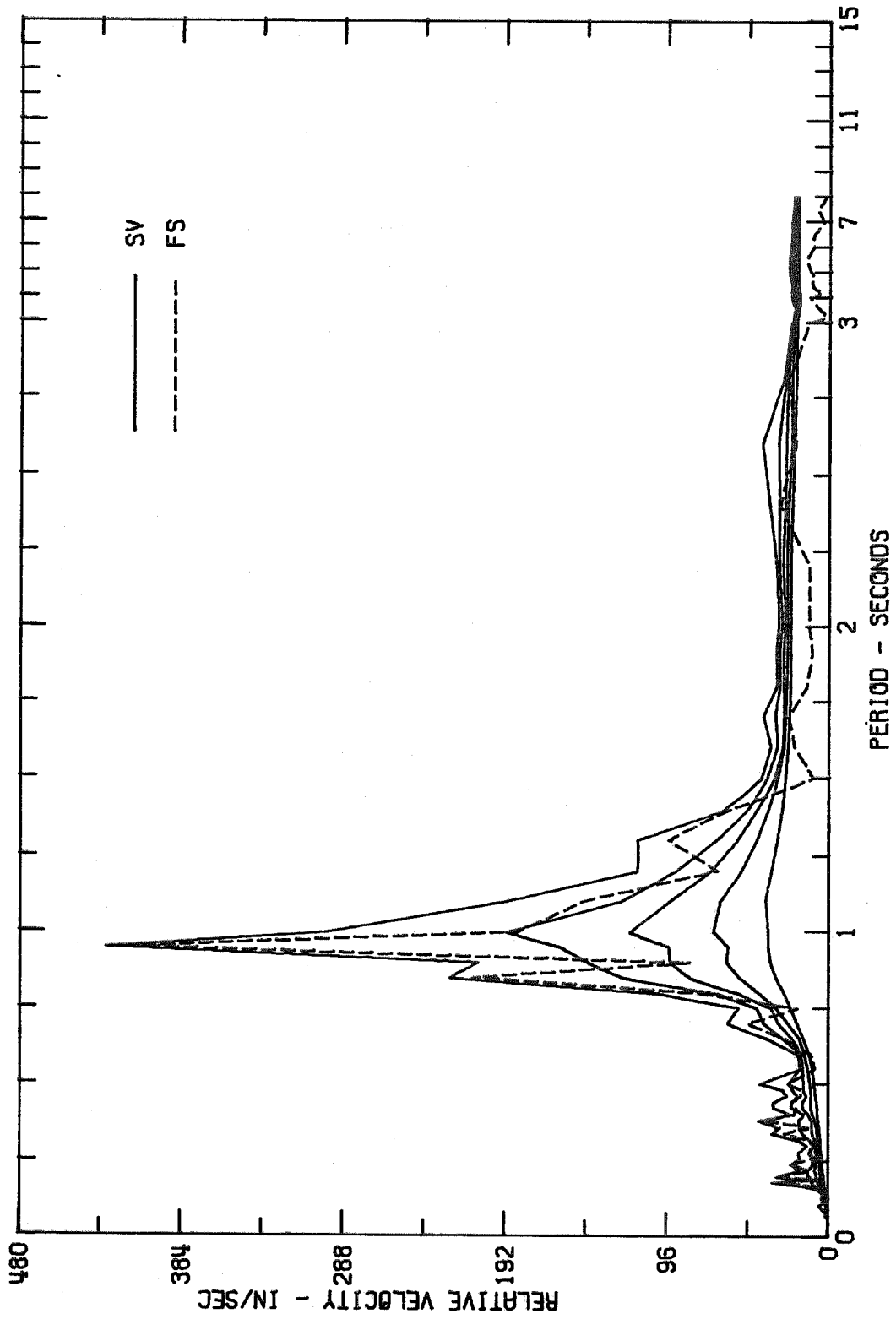
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
DAMPING = 0 PER CENT																	
DAMPING = 2 PER CENT																	
DAMPING = 5 PER CENT																	
DAMPING = 10 PER CENT																	
DAMPING = 20 PER CENT																	
0.040	384-4	520-5	140-3	333-3	818-3	496-5	102-3	317-3	780-3	493-5	101-3	316-3	775-3	492-5	103-3	315-3	773-3
0.042	811-4	587-5	167-3	340-3	879-3	551-5	115-3	320-3	825-3	547-5	113-3	316-3	816-3	544-5	114-3	316-3	814-3
0.044	125-4	609-5	151-3	322-3	870-3	597-5	131-3	315-3	852-3	598-5	126-3	316-3	856-3	598-5	126-3	317-3	855-3
0.046	117-4	662-5	201-3	320-3	905-3	651-5	139-3	314-3	889-3	655-5	140-3	316-3	895-3	656-5	138-3	318-3	896-3
0.048	999-4	726-5	213-3	322-3	951-3	726-5	161-3	322-3	950-3	719-5	156-3	319-3	942-3	718-5	152-3	319-3	938-3
0.050	110-3	813-5	206-3	332-3	102-2	780-5	176-3	319-3	980-3	782-5	171-3	319-3	983-3	783-5	168-3	320-3	984-3
0.055	973-4	103-4	236-3	349-3	118-2	987-5	152-3	333-3	112-2	972-5	201-3	328-3	111-2	960-5	203-3	322-3	108-2
0.060	143-3	117-4	386-3	333-3	122-2	116-4	282-3	330-3	121-2	114-4	270-3	326-3	120-2	113-4	254-3	324-3	119-2
0.065	330-3	147-4	487-3	356-3	142-2	138-4	421-3	335-3	134-2	130-4	370-3	316-3	126-2	133-4	328-3	322-3	130-2
0.070	657-3	205-4	958-3	429-3	184-2	168-4	435-3	351-3	151-2	162-4	417-3	339-3	145-2	159-4	391-3	333-3	142-2
0.075	390-3	242-4	845-3	441-3	203-2	200-4	540-3	364-3	168-2	191-4	500-3	346-3	160-2	188-4	457-3	341-3	155-2
0.080	138-2	319-4	176-2	509-3	250-2	212-4	815-3	340-3	166-2	213-4	687-3	340-3	167-2	217-4	596-3	347-3	171-2
0.085	133-2	363-4	170-2	513-3	268-2	273-4	100-2	386-3	202-2	258-4	869-3	367-3	190-2	254-4	732-3	361-3	187-2
0.090	138-2	382-4	188-2	582-3	266-2	356-4	105-2	450-3	292-2	322-4	966-3	408-3	224-2	303-4	862-3	386-3	211-2
0.095	263-2	611-4	307-2	692-3	404-2	438-4	146-2	497-3	290-2	389-4	120-2	443-3	257-2	365-4	105-2	443-3	229-2
0.100	482-2	117-3	626-2	120-2	737-2	517-4	187-2	532-3	325-2	446-4	131-2	455-3	280-2	429-4	128-2	446-3	269-2
0.110	715-2	160-3	742-2	135-2	914-2	957-4	374-2	814-3	546-2	759-4	263-2	636-3	433-2	802-4	193-2	533-3	358-2
0.120	217-1	437-3	224-1	310-2	229-1	152-3	718-2	108-2	798-2	104-3	435-2	751-3	549-2	827-4	276-2	578-3	420-2
0.130	971-2	262-3	121-1	158-2	126-1	127-3	565-2	765-3	613-2	100-3	400-2	600-3	483-2	860-4	290-2	527-3	415-2
0.140	646-2	246-3	985-2	128-2	110-1	115-3	437-2	602-3	518-2	943-4	350-2	496-3	423-2	886-4	273-2	469-3	397-2
0.150	680-2	237-3	890-2	108-2	996-2	123-3	386-2	565-3	518-2	113-3	362-2	517-3	473-2	951-4	304-2	491-3	398-2
0.160	114-1	123-2	123-1	127-2	125-1	172-3	548-2	690-3	678-2	151-3	467-2	604-3	596-2	120-3	361-2	441-3	472-2
0.170	376-1	102-2	376-1	151-2	377-1	301-3	917-2	106-2	111-1	201-3	606-2	720-3	743-2	142-3	400-2	514-3	526-2
0.180	982-2	553-3	186-1	174-2	193-1	276-3	799-2	873-3	964-2	187-3	519-2	597-3	653-2	147-3	372-2	474-3	515-2
0.190	723-2	436-3	140-1	123-2	144-1	195-3	640-2	554-3	644-2	169-3	502-2	481-3	559-2	154-3	393-2	442-3	512-2
0.200	427-2	350-3	897-2	895-3	110-1	238-3	665-2	606-3	748-2	190-3	561-2	494-3	599-2	171-3	429-2	440-3	540-2
0.220	268-1	944-3	270-1	199-2	269-1	397-3	110-1	834-3	113-1	252-3	660-2	534-3	720-2	221-3	499-2	483-3	633-2
0.240	170-1	746-3	186-1	132-2	195-1	443-3	949-2	784-3	116-1	337-3	687-2	607-3	882-2	266-3	616-2	478-3	697-2
0.260	240-1	121-2	265-1	184-2	294-1	611-3	142-1	921-3	147-1	397-3	100-1	615-3	959-2	338-3	702-2	528-3	817-2
0.280	168-1	111-2	235-1	144-2	249-1	826-3	166-1	107-2	185-1	634-3	121-1	835-3	142-1	463-3	878-2	619-3	104-1
0.300	162-1	109-2	212-1	123-2	228-1	858-3	161-1	979-3	179-1	693-3	122-1	798-3	145-1	538-3	955-2	627-3	112-1
0.320	157-1	123-2	216-1	123-2	242-1	893-3	145-1	888-3	175-1	706-3	118-1	713-3	138-1	591-3	982-2	600-3	116-1
0.340	327-1	229-2	397-1	203-2	424-1	134-2	218-1	119-2	249-1	976-3	148-1	874-3	180-1	709-3	991-2	634-3	131-1
0.360	309-1	221-2	368-1	174-2	386-1	146-2	228-1	115-2	256-1	105-2	153-1	843-3	184-1	793-3	108-1	633-3	138-1
0.380	150-1	124-2	190-1	884-3	206-1	110-2	161-1	780-3	182-1	105-2	153-1	754-3	175-1	889-3	119-1	638-3	147-1
0.400	515-1	358-2	546-1	229-2	563-1	158-2	235-1	100-2	248-1	125-2	178-1	805-3	197-1	991-3	130-1	640-3	155-1
0.420	199-1	236-2	342-1	136-2	353-1	164-2	239-1	952-3	203-1	164-2	154-1	639-3	171-1	110-2	137-1	137-1	158-1
0.440	223-1	227-2	304-1	119-2	324-1	142-2	192-1	755-3	246-1	120-2	154-1	639-3	171-1	110-2	137-1	137-1	158-1
0.460	391-1	364-2	473-1	175-2	457-1	180-2	236-1	873-3	246-1	132-2	179-1	642-3	181-1	124-2	150-1	616-3	170-1
0.480	468-1	416-2	527-1	184-2	544-1	267-2	339-1	119-2	350-1	194-2	240-1	872-3	254-1	146-2	173-1	660-3	192-1
0.500	888-1	892-2	110-0	365-2	112-0	350-2	422-1	143-2	441-1	235-2	285-1	972-3	296-1	162-2	187-1	675-3	203-1
0.550	350-1	555-2	623-1	187-2	634-1	375-2	396-1	127-2	100-2	338-1	222-2	220-1	764-3	253-1	146-2	153-1	531-3
0.600	783-1	100-1	104-0	286-2	105-0	424-2	436-1	121-2	444-1	307-2	306-1	882-3	322-1	256-2	251-1	742-3	268-1
0.650	311-0	324-1	314-0	786-2	314-0	104-1	100-0	253-2	101-0	486-2	468-1	118-2	470-1	298-2	286-1	734-3	288-1
0.700	697-1	834-2	771-1	174-2	749-1	559-2	523-1	116-2	502-1	428-2	376-1	901-3	384-1	321-2	280-1	684-3	288-1

IIIG109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP NOOE

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND C FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	673-1	950-2	825-1	172-2	796-1	547-2	470-1	997-3	459-1	449-2	373-1	821-3	376-1	334-2	271-1	620-3	280-1
0.80	959-1	149-1	119 0	239-2	117 0	833-2	678-1	133-2	654-1	511-2	413-1	823-3	401-1	340-2	264-1	555-3	267-1
0.85	592-1	118-1	898-1	167-2	875-1	842-2	662-1	119-2	622-1	566-2	448-1	806-3	418-1	340-2	278-1	493-3	251-1
0.90	629-1	961-2	691-1	121-2	670-1	699-2	532-1	883-3	488-1	507-2	389-1	642-3	354-1	328-2	259-1	425-3	229-1
0.95	597-1	903-2	600-1	102-2	597-1	531-2	382-1	602-3	351-1	400-2	284-1	456-3	265-1	291-2	222-1	339-3	192-1
1.00	230-1	510-2	339-1	522-3	320-1	385-2	284-1	395-3	242-1	334-2	245-1	345-3	210-1	279-2	212-1	296-3	175-1
1.10	175-1	537-2	326-1	453-3	306-1	325-2	269-1	275-3	185-1	287-2	243-1	245-3	164-1	244-2	212-1	216-3	139-1
1.20	238-1	498-2	272-1	353-3	260-1	299-2	218-1	213-3	156-1	269-2	207-1	193-3	141-1	230-2	189-1	170-3	120-1
1.30	129-1	347-2	182-1	210-3	168-1	248-2	165-1	151-3	120-1	232-2	166-1	143-3	112-1	209-2	163-1	133-3	101-1
1.40	624-2	429-2	225-1	224-3	192-1	322-2	176-1	169-3	144-1	252-2	142-1	133-3	113-1	207-2	142-1	113-3	932-2
1.50	179-1	486-2	210-1	221-3	203-1	305-2	159-1	139-3	128-1	255-2	143-1	117-3	106-1	219-2	129-1	104-3	918-2
1.60	163-1	462-2	190-1	184-3	181-1	287-2	174-1	115-3	112-1	261-2	155-1	105-3	102-1	240-2	134-1	101-3	944-2
1.70	148-1	683-2	272-1	241-3	252-1	497-2	199-1	176-3	183-1	376-2	166-1	134-3	139-1	270-2	147-1	101-3	100-1
1.80	255-1	813-2	314-1	256-3	284-1	550-2	260-1	174-3	192-1	382-2	210-1	121-3	133-1	257-2	166-1	861-4	900-2
1.90	223-1	762-2	282-1	216-3	252-1	532-2	238-1	150-3	175-1	419-2	203-1	119-3	138-1	305-2	165-1	883-4	101-1
2.00	196-1	783-2	243-1	200-3	246-1	523-2	186-1	133-3	164-1	434-2	170-1	112-3	136-1	331-2	149-1	874-4	104-1
2.20	949-2	428-2	149-1	906-4	122-1	384-2	129-1	813-4	109-1	352-2	116-1	756-4	100-1	308-2	114-1	686-4	880-2
2.40	356-2	245-2	123-1	435-4	642-2	251-2	121-1	447-4	658-2	274-2	118-1	497-4	719-2	273-2	116-1	521-4	717-2
2.60	845-2	425-2	128-1	535-4	920-2	355-2	112-1	465-4	797-2	314-2	113-1	420-4	705-2	268-2	113-1	385-4	602-2
2.80	911-2	410-2	125-1	535-4	920-2	355-2	112-1	465-4	797-2	314-2	113-1	420-4	705-2	268-2	113-1	385-4	602-2
3.00	864-2	422-2	129-1	480-4	885-2	345-2	119-1	393-4	722-2	300-2	112-1	347-4	629-2	266-2	112-1	324-4	557-2
3.20	775-2	476-2	135-1	475-4	935-2	351-2	120-1	351-4	689-2	301-2	113-1	307-4	591-2	266-2	112-1	288-4	523-2
3.40	965-2	533-2	114-1	472-4	986-2	316-2	114-1	281-4	585-2	281-2	113-1	251-4	520-2	257-2	112-1	246-4	475-2
3.60	455-2	350-2	116-1	276-4	611-2	309-2	115-1	245-4	540-2	256-2	114-1	209-4	447-2	244-2	113-1	209-4	427-2
3.80	469-3	287-2	116-1	203-4	474-2	275-2	115-1	196-4	455-2	250-2	114-1	183-4	413-2	237-2	112-1	183-4	392-2
4.00	432-2	304-2	115-1	194-4	478-2	284-2	114-1	183-4	447-2	253-2	113-1	169-4	398-2	240-2	112-1	168-4	377-2
4.20	465-2	387-2	114-1	224-4	579-2	300-2	113-1	175-4	450-2	266-2	112-1	156-4	425-2	261-2	110-1	151-4	374-2
4.40	792-2	584-2	112-1	308-4	834-2	365-2	111-1	194-4	522-2	298-2	111-1	164-4	425-2	261-2	110-1	151-4	374-2
4.60	717-2	615-2	110-1	297-4	841-2	421-2	109-1	203-4	575-2	327-2	109-1	159-4	446-2	277-2	108-1	140-4	379-2
4.80	631-2	580-2	115-1	257-4	760-2	429-2	111-1	190-4	561-2	345-2	107-1	155-4	451-2	285-2	107-1	131-4	374-2
5.00	732-2	583-2	120-1	238-4	733-2	399-2	115-1	163-4	501-2	345-2	109-1	142-4	434-2	283-2	105-1	121-4	356-2
5.50	217-2	409-2	114-1	138-4	467-2	374-2	111-1	127-4	428-2	333-2	106-1	120-4	381-2	284-2	101-1	120-4	325-2
6.00	257-2	390-2	970-2	110-4	408-2	363-2	969-2	104-4	380-2	330-2	963-2	101-4	346-2	288-2	978-2	106-4	302-2
6.50	351-2	370-2	941-2	896-5	357-2	293-2	931-2	720-5	283-2	279-2	934-2	750-5	269-2	259-2	954-2	870-5	251-2
7.00	456-2	525-2	939-2	109-4	471-2	375-2	930-2	785-5	337-2	252-2	920-2	565-5	226-2	222-2	940-2	706-5	200-2
7.50	214-2	389-2	929-2	708-5	326-2	315-2	922-2	574-5	264-2	238-2	915-2	470-5	199-2	209-2	933-2	618-5	175-2
8.00	256-2	335-2	916-2	535-5	263-2	269-2	910-2	432-5	212-2	216-2	916-2	390-5	169-2	194-2	932-2	542-5	153-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP N90E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

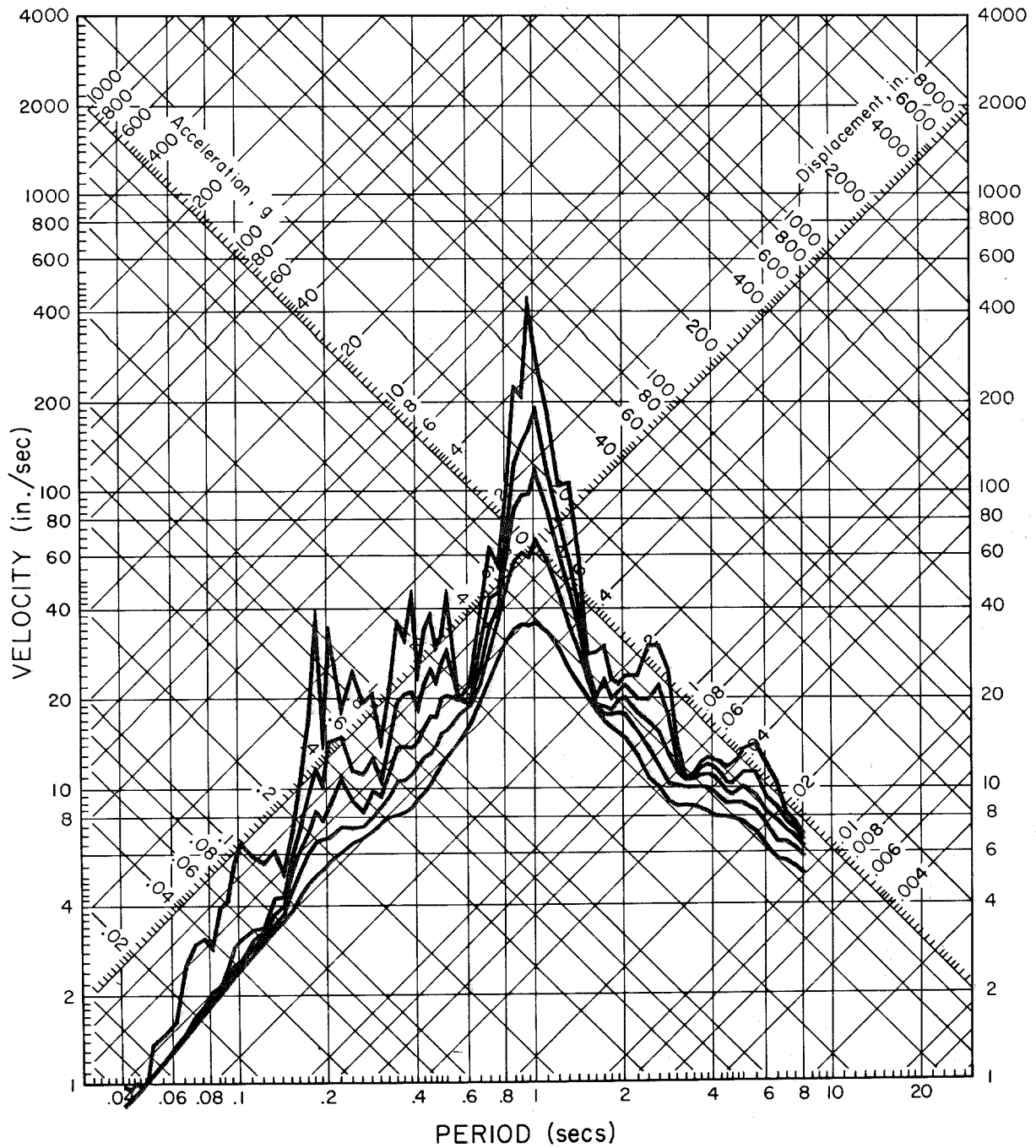


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP N90E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

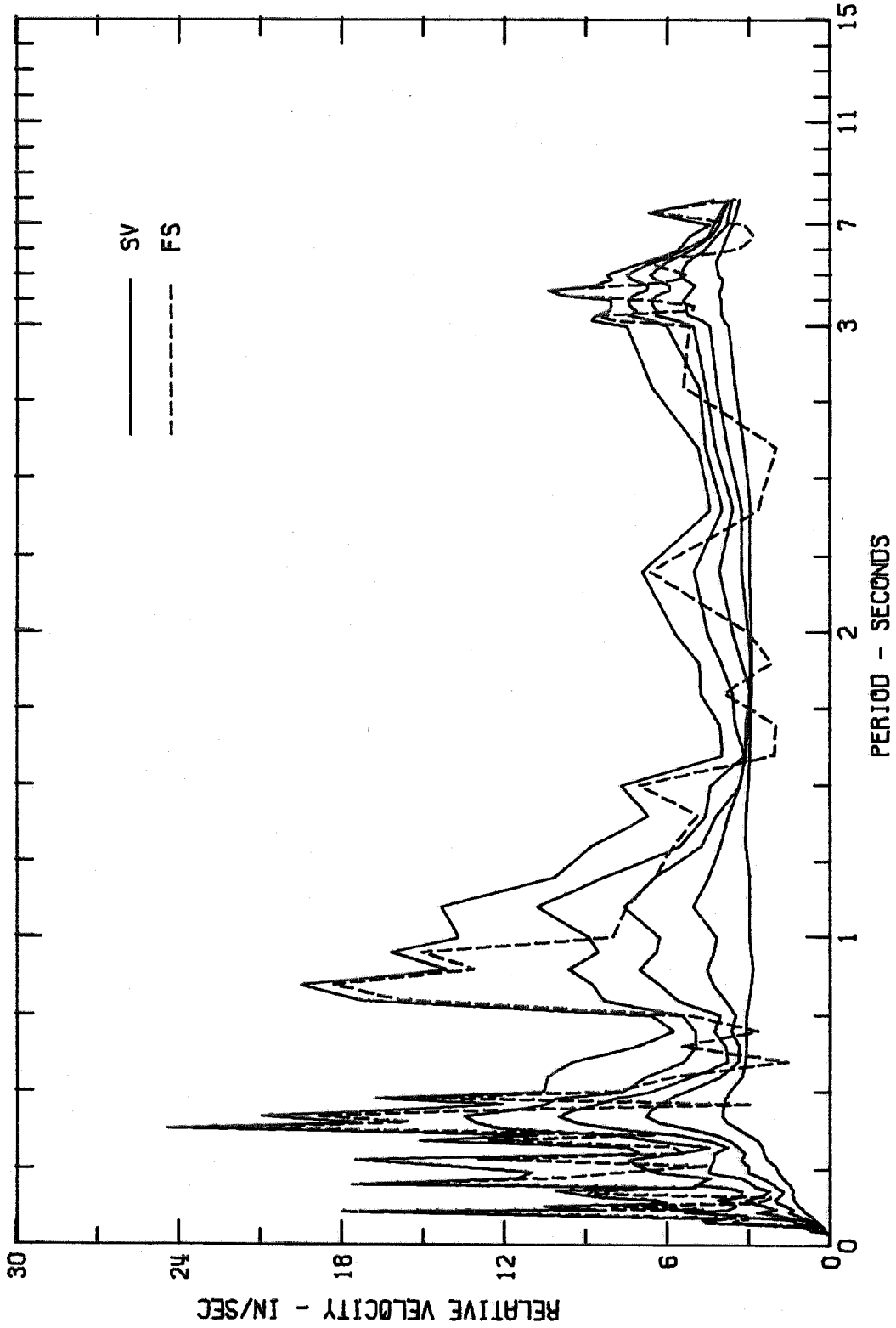
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	
0.040	113-3	630-5	227-3	402-3	990-3	544-5	958-4	348-3	855-3	544-5	104-3	348-3	855-3	544-5	103-3	348-3	855-3	544-5
0.042	567-4	648-5	182-3	376-3	970-3	601-5	123-3	348-3	899-3	597-5	117-3	346-3	893-3	599-5	113-3	347-3	896-3	602-5
0.044	126-3	716-5	190-3	378-3	102-2	656-5	128-3	346-3	937-3	655-5	127-3	346-3	935-3	658-5	124-3	348-3	941-3	662-5
0.046	708-4	723-5	163-3	349-3	988-3	721-5	144-3	348-3	985-3	722-5	137-3	349-3	986-3	724-5	134-3	349-3	989-3	726-5
0.048	794-4	811-5	178-3	360-3	1086-3	795-5	145-3	348-3	104-2	794-5	146-3	349-3	103-2	793-5	145-3	352-3	103-2	793-5
0.050	418-3	109-4	442-3	349-3	137-2	871-5	159-3	356-3	109-2	869-5	158-3	355-3	109-2	867-5	156-3	355-3	109-2	865-5
0.055	420-3	131-4	441-3	443-3	149-2	107-4	193-3	363-3	122-2	107-4	190-3	362-3	122-2	106-4	189-3	361-3	122-2	106-4
0.060	224-3	158-4	481-3	448-3	165-2	131-4	274-3	374-3	138-2	130-4	251-3	371-3	137-2	129-4	231-3	369-3	135-2	128-4
0.065	133-2	267-4	137-2	446-3	258-2	157-4	308-3	382-3	152-2	156-4	310-3	378-3	150-2	155-4	284-3	377-3	150-2	152-4
0.070	146-2	336-4	177-2	702-3	301-2	193-4	303-3	403-3	173-2	187-4	410-3	391-3	168-2	184-4	332-3	388-3	165-2	180-4
0.075	134-2	376-4	237-2	684-3	315-2	224-4	656-3	407-3	187-2	219-4	443-3	399-3	183-2	215-4	377-3	394-3	180-2	210-4
0.080	108-2	373-4	181-2	596-3	292-2	267-4	869-3	427-3	209-2	258-4	609-3	414-3	203-2	252-4	486-3	403-3	198-2	242-4
0.085	227-2	540-4	298-2	765-3	399-2	297-4	130-2	420-3	219-2	296-4	905-3	419-3	219-2	290-4	629-3	411-3	214-2	277-4
0.090	245-2	607-4	268-2	766-3	423-2	359-4	123-2	455-3	250-2	338-4	905-3	428-3	236-2	329-4	693-3	419-3	230-2	315-4
0.095	412-2	869-4	434-2	985-3	574-2	448-4	155-2	509-3	296-2	389-4	963-3	440-3	257-2	374-4	706-3	425-3	247-2	355-4
0.100	596-2	105-3	575-2	107-2	659-2	499-4	182-2	510-3	313-2	424-4	110-2	432-3	266-2	418-4	756-3	428-3	263-2	398-4
0.110	253-2	104-3	393-2	881-3	595-2	592-4	195-2	502-3	338-2	528-4	128-2	465-3	313-2	519-4	851-3	441-3	296-2	487-4
0.120	312-2	108-3	381-2	769-3	567-2	656-4	174-2	466-3	343-2	634-4	141-2	453-3	332-2	618-4	116-2	443-3	323-2	586-4
0.130	269-2	129-3	433-2	781-3	623-2	892-4	212-2	539-3	431-2	790-4	154-2	476-3	381-2	730-4	138-2	442-3	353-2	694-4
0.140	324-2	116-3	377-2	605-3	521-2	970-4	203-2	506-3	435-2	908-4	202-2	473-3	407-2	854-4	181-2	447-3	383-2	808-4
0.150	330-2	173-3	482-2	789-3	727-2	144-3	388-2	657-3	603-2	127-3	318-2	578-3	535-2	110-3	246-2	509-3	462-2	944-4
0.160	421-2	279-3	899-2	111-2	109-1	191-3	520-2	767-3	753-2	162-3	391-2	652-3	640-2	130-3	303-2	561-3	544-2	113-3
0.170	105-1	475-3	159-1	168-2	175-1	261-3	826-2	922-3	965-2	195-3	515-2	689-3	722-2	166-3	379-2	594-3	616-2	131-3
0.180	282-1	105-2	337-1	133-2	369-1	336-3	101-1	106-2	117-1	243-3	653-2	773-3	851-2	191-3	450-2	608-3	669-2	148-3
0.190	811-4	464-3	140-1	131-2	153-1	314-3	717-2	895-3	104-1	238-3	613-2	775-3	790-2	206-3	483-2	590-3	684-2	163-3
0.200	274-1	106-2	312-1	273-2	335-1	461-3	123-1	117-2	145-1	281-3	713-2	725-3	883-2	220-3	492-2	561-3	693-2	182-3
0.220	107-1	649-3	168-1	137-2	185-1	528-3	121-1	111-2	150-1	383-3	841-2	816-3	109-1	263-3	574-2	571-3	753-2	217-3
0.240	227-1	951-3	229-1	168-2	249-1	444-3	954-2	787-3	116-1	351-3	754-2	629-3	921-2	284-3	558-2	514-3	744-2	253-3
0.260	738-2	811-3	169-1	122-2	196-1	469-3	918-2	709-3	113-1	350-3	675-2	527-3	847-2	312-3	548-2	475-3	754-2	285-3
0.280	126-1	938-3	179-1	122-2	210-1	573-3	116-1	751-3	128-1	443-3	810-2	576-3	994-2	360-3	606-2	481-3	809-2	323-3
0.300	860-2	693-3	125-1	787-3	145-1	510-3	893-2	580-3	106-1	456-3	750-2	516-3	956-2	421-3	645-2	483-3	883-2	369-3
0.320	104-1	111-2	179-1	111-2	219-1	747-3	114-1	747-3	146-1	587-3	849-2	583-3	115-1	487-3	680-2	499-3	958-2	411-3
0.340	265-1	197-2	339-1	174-2	365-1	106-2	155-1	938-3	196-1	755-3	975-2	674-3	139-1	580-3	682-2	521-3	107-1	446-3
0.360	119-1	183-2	292-1	144-2	320-1	120-2	174-1	945-3	209-1	804-3	103-1	632-3	140-1	619-3	737-2	492-3	108-1	482-3
0.380	384-1	269-2	413-1	191-2	445-1	129-2	179-1	913-3	213-1	837-3	104-1	597-3	138-1	683-3	836-2	491-3	113-1	530-3
0.400	200-1	157-2	228-1	100-2	247-1	118-2	145-1	761-3	186-1	929-3	120-1	595-3	145-1	771-3	983-2	498-3	121-1	598-3
0.420	190-1	233-2	330-1	135-2	348-1	153-2	222-1	894-3	229-1	109-2	154-1	642-3	164-1	864-3	107-1	511-3	129-1	659-3
0.440	218-1	271-2	329-1	143-2	387-1	178-2	222-1	939-3	254-1	124-2	155-1	661-3	177-1	929-3	106-1	498-3	132-1	739-3
0.460	167-1	219-2	247-1	106-2	299-1	168-2	182-1	810-3	229-1	128-2	132-1	626-3	176-1	103-2	101-1	506-3	141-1	835-3
0.480	159-1	252-2	273-1	112-2	330-1	204-2	212-1	906-3	267-1	155-2	153-1	693-3	203-1	118-2	109-1	530-3	154-1	932-3
0.500	242-1	356-2	411-1	145-2	447-1	233-2	238-1	956-3	294-1	165-2	150-1	681-3	207-1	127-2	111-1	524-3	159-1	103-2
0.550	790-2	176-2	164-1	597-3	201-1	176-2	170-1	599-3	202-1	175-2	157-1	594-3	200-1	156-2	125-1	537-3	178-1	127-2
0.600	109-1	215-2	184-1	611-3	225-1	183-2	166-1	521-3	192-1	191-2	164-1	547-3	200-1	183-2	145-1	529-3	191-1	159-2
0.650	266-1	408-2	368-1	988-3	394-1	318-2	276-1	769-3	307-1	262-2	218-1	637-3	253-1	234-2	172-2	572-3	226-1	205-2
0.700	483-1	726-2	604-1	151-2	651-1	490-2	388-1	102-2	440-1	395-2	302-1	827-3	355-1	328-2	244-1	693-3	294-2	187-1

111G109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP N90E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT					
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	182-1	675-2	535-1	122-2	566-1	549-2	431-1	100-2	460-1	499-2	344-1	912-3	418-1	448-2	315-1	827-3	375-1	333-2	226-1	642-3	279-1
0.80	763-1	133-1	101 0	213-2	105 0	925-2	664-1	148-2	726-1	775-2	539-1	124-2	608-1	612-2	416-1	993-3	481-1	405-2	267-1	689-3	318-1
0.85	211 0	310-1	225 0	439-2	229 0	171-1	122 0	243-2	127 0	120-1	827-1	172-2	893-1	798-2	532-1	115-2	590-1	470-2	314-1	710-3	348-1
0.90	823-1	306-1	207 0	386-2	213 0	212-1	143 0	268-2	148 0	141-1	942-1	179-2	985-1	902-2	607-1	116-2	630-1	516-2	348-1	698-3	360-1
0.95	414 0	654-1	429 0	741-2	432 0	249-1	159 0	283-2	165 0	150-1	953-1	170-2	994-1	916-2	599-1	105-2	606-1	538-2	360-1	655-3	355-1
1.00	184 0	475-1	298 0	486-2	298 0	306-1	191 0	314-2	192 0	189-1	118 0	194-2	119 0	110-1	682-1	115-2	695-1	578-2	362-1	638-3	363-1
1.10	144 0	328-1	190 0	277-2	187 0	206-1	122 0	174-2	117 0	153-1	939-1	130-2	877-1	103-1	642-1	891-3	590-1	590-2	378-1	544-3	337-1
1.20	661-1	202-1	112 0	143-2	105 0	155-1	903-1	110-2	816-1	119-1	696-1	852-3	624-1	877-2	516-1	637-3	459-1	570-2	340-1	442-3	298-1
1.30	950-1	224-1	113 0	135-2	108 0	123-1	662-1	747-3	595-1	974-2	539-1	593-3	470-1	739-2	426-1	460-3	357-1	524-2	304-1	349-3	253-1
1.40	595-1	138-1	627-1	722-3	621-1	927-2	480-1	485-3	416-1	791-2	423-1	416-3	355-1	652-2	357-1	350-3	292-1	503-2	273-1	288-3	226-1
1.50	935-2	679-2	395-1	308-3	284-1	618-2	361-1	281-3	259-1	594-2	321-1	272-3	248-1	562-2	301-1	265-3	235-1	485-2	258-1	245-3	203-1
1.60	206-1	735-2	344-1	293-3	288-1	520-2	303-1	208-3	204-1	492-2	272-1	198-3	193-1	493-2	265-1	206-3	193-1	468-2	243-1	210-3	184-1
1.70	241-1	820-2	391-1	290-3	303-1	636-2	318-1	225-3	235-1	513-2	267-1	183-3	189-1	482-2	254-1	179-3	178-1	462-2	233-1	186-3	170-1
1.80	132-1	672-2	309-1	212-2	234-1	578-2	289-1	182-3	202-1	528-2	272-1	169-3	184-1	510-2	252-1	169-3	178-1	465-2	228-1	169-3	162-1
1.90	999-2	684-2	313-1	193-3	226-1	646-2	295-1	183-3	213-1	601-2	273-1	172-3	198-1	545-2	248-1	162-3	180-1	470-2	226-1	156-3	155-1
2.00	120-1	768-2	298-1	196-3	241-1	713-2	279-1	182-3	224-1	647-2	259-1	168-3	203-1	567-2	245-1	154-3	178-1	473-2	227-1	144-3	148-1
2.20	120-1	843-2	315-1	178-3	240-1	707-2	297-1	149-3	201-1	632-2	277-1	135-3	180-1	549-2	253-1	124-3	156-1	456-2	225-1	120-3	130-1
2.40	294-1	116-1	356-1	206-3	304-1	761-2	298-1	135-3	199-1	646-2	259-1	116-3	169-1	526-1	240-1	995-4	137-1	418-2	218-1	972-4	109-1
2.60	201-1	125-1	403-1	189-3	303-1	925-2	305-1	140-3	223-1	645-2	254-1	986-4	156-1	494-2	225-1	817-4	119-1	421-2	207-1	832-4	101-1
2.80	248-1	111-1	273-1	145-3	250-1	782-2	260-1	102-3	175-1	581-2	245-1	770-4	130-1	466-2	225-1	662-4	104-1	407-2	198-1	723-4	914-2
3.00	124-1	683-2	228-1	777-4	143-1	579-2	226-1	660-4	121-1	544-2	223-1	634-4	114-1	492-2	215-1	611-4	103-1	420-2	196-1	636-4	880-2
3.20	270-2	555-2	212-1	555-4	109-1	558-2	213-1	560-4	109-1	549-2	211-1	564-4	107-1	518-2	206-1	571-4	101-1	450-2	192-1	609-4	884-2
3.40	393-2	612-2	215-1	541-4	113-1	603-2	210-1	536-4	111-1	586-2	205-1	534-4	108-1	549-2	198-1	539-4	101-1	476-2	188-1	580-4	880-2
3.60	742-2	708-2	209-1	559-4	123-1	678-2	204-1	537-4	118-1	639-2	198-1	519-4	111-1	584-2	190-1	514-4	101-1	496-2	185-1	551-4	866-2
3.80	105-1	774-2	222-1	548-4	128-1	732-2	213-1	521-4	121-1	680-2	203-1	497-4	112-1	611-2	190-1	487-4	101-1	510-2	182-1	520-4	844-2
4.00	121-1	797-2	231-1	509-4	125-1	755-2	221-1	485-4	118-1	700-2	210-1	463-4	110-1	625-2	195-1	454-4	981-2	518-2	179-1	488-4	814-2
4.20	514-2	824-2	230-1	478-4	123-1	754-2	222-1	439-4	112-1	700-2	211-1	422-4	104-1	624-2	198-1	417-4	934-2	542-2	184-1	456-4	811-2
4.40	105-1	829-2	226-1	438-4	118-1	738-2	221-1	392-4	105-1	686-2	214-1	377-4	979-2	629-2	204-1	382-4	899-2	564-2	188-1	438-4	806-2
4.60	112-1	899-2	233-1	434-4	122-1	770-2	228-1	373-4	105-1	705-2	220-1	355-4	964-2	661-2	209-1	369-4	903-2	584-2	192-1	421-4	798-2
4.80	100-1	968-2	240-1	429-4	126-1	838-2	234-1	374-4	109-1	758-2	225-1	350-4	993-2	690-2	213-1	355-4	903-2	602-2	194-1	405-4	788-2
5.00	116-1	108-1	245-1	443-4	136-1	910-2	238-1	374-4	114-1	815-2	228-1	347-4	102-1	715-2	215-1	342-4	898-2	616-2	196-1	388-4	774-2
5.50	142-1	124-1	244-1	421-4	142-1	999-2	237-1	338-4	114-1	842-2	227-1	299-4	962-2	748-2	214-1	302-4	854-2	631-2	196-1	347-4	721-2
6.00	100-1	115-1	232-1	328-4	121-1	898-2	221-1	256-4	940-2	803-2	213-1	241-4	841-2	722-2	204-1	254-4	756-2	614-2	191-1	305-4	643-2
6.50	933-2	108-1	230-1	263-4	105-1	905-2	223-1	221-4	875-2	810-2	215-1	207-4	783-2	692-2	204-1	210-4	668-2	604-2	188-1	266-4	584-2
7.00	377-2	927-2	227-1	193-4	832-2	867-2	222-1	183-4	778-2	812-2	215-1	184-4	729-2	740-2	205-1	197-4	664-2	638-2	190-1	250-4	573-2
7.50	752-2	919-2	219-1	167-4	770-2	880-2	215-1	163-4	737-2	830-2	210-1	166-4	695-2	760-2	202-1	181-4	636-2	657-2	191-1	234-4	550-2
8.00	228-2	892-2	215-1	142-4	701-2	860-2	212-1	140-4	675-2	816-2	208-1	145-4	641-2	754-2	203-1	163-4	592-2	661-2	195-1	217-4	519-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

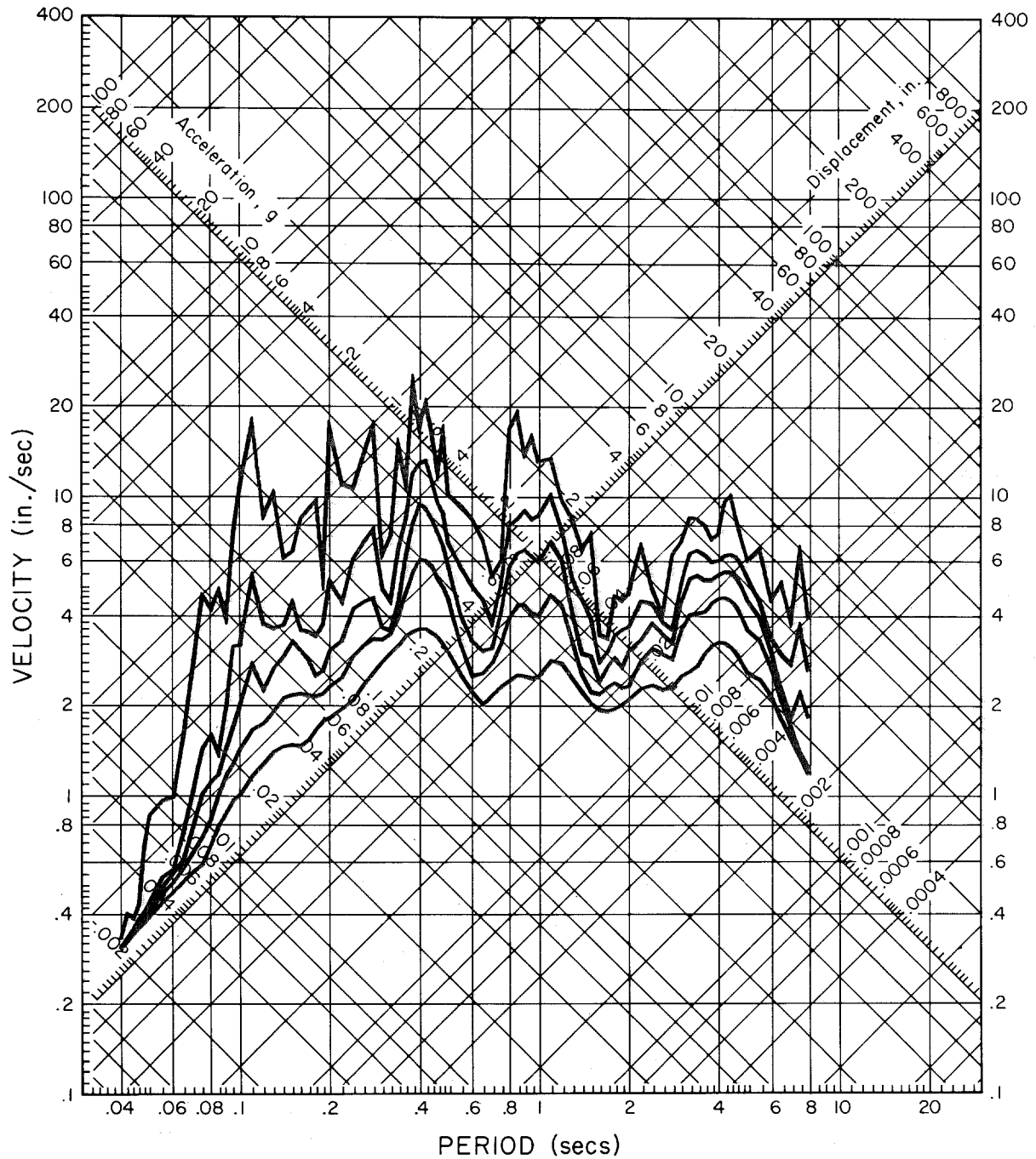


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG109 71.023.0 CALTECH MILLIKAN LIBRARY, 10TH FLOOR, PASADENA, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



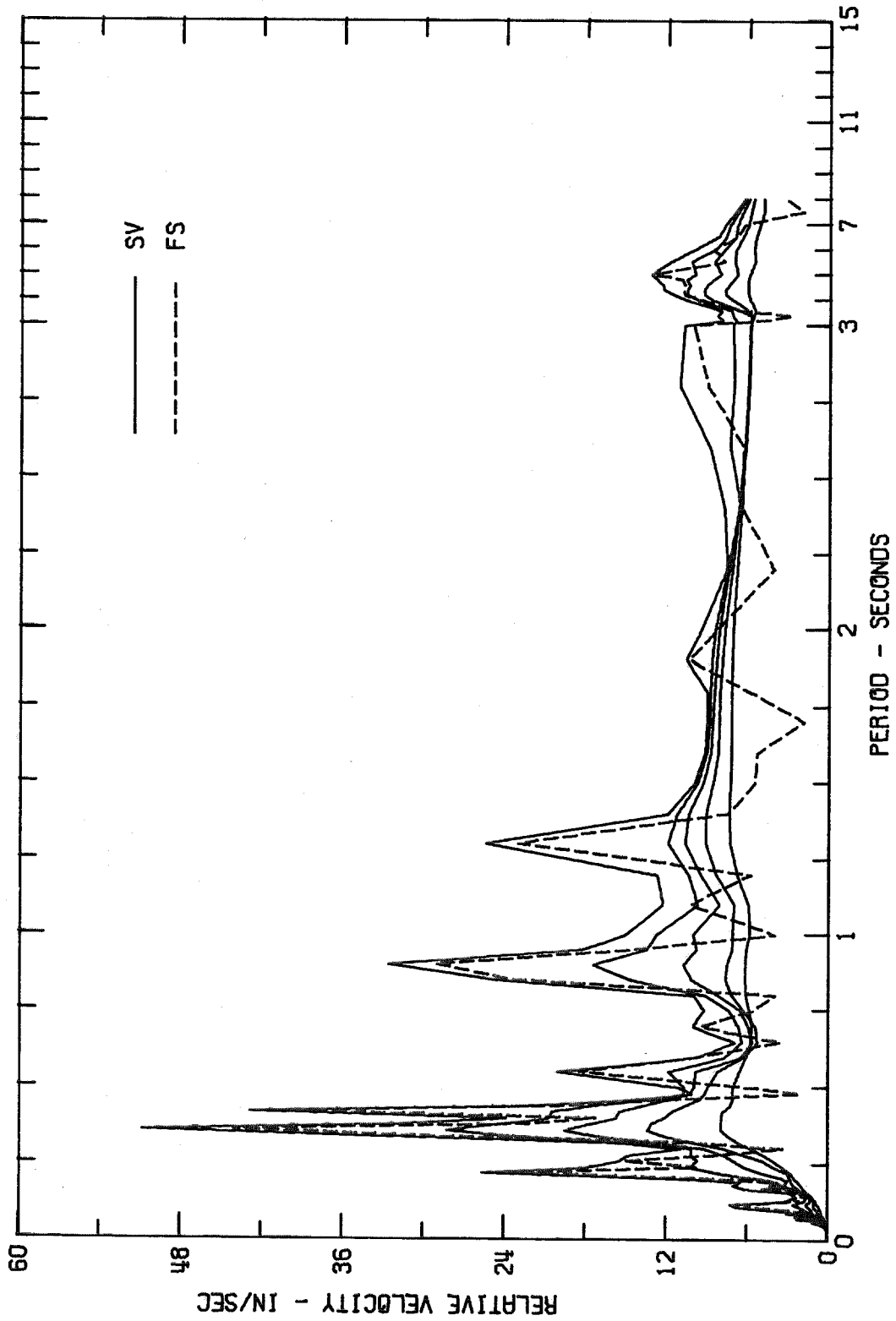
THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND P&V, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	998-4	215-5	140-3	137-3	338-3	201-5	115-3	128-3	316-3	198-5	118-3	127-3	312-3	200-5	117-3	127-3	315-3
0.042	516-4	273-5	201-3	158-3	409-3	227-5	140-3	131-3	339-3	224-5	133-3	130-3	336-3	223-5	130-3	129-3	334-3
0.044	863-4	276-5	168-3	146-3	395-3	254-5	147-3	134-3	363-3	249-5	144-3	131-3	355-3	247-5	143-3	130-3	353-3
0.046	179-3	326-5	295-3	157-3	445-3	289-5	151-3	139-3	394-3	275-5	152-3	133-3	375-3	273-5	158-3	132-3	373-3
0.048	208-3	527-5	514-3	234-3	690-3	319-5	198-3	141-3	418-3	305-5	181-3	135-3	400-3	302-5	177-3	134-3	395-3
0.050	547-3	700-5	737-3	286-3	880-3	358-5	233-3	146-3	450-3	339-5	211-3	139-3	426-3	332-5	197-3	136-3	417-3
0.055	516-3	860-5	747-3	290-3	983-3	474-5	308-3	160-3	541-3	441-5	259-3	149-3	504-3	418-5	241-3	142-3	478-3
0.060	837-3	965-5	946-3	274-3	101-2	553-5	340-3	157-3	579-3	535-5	291-3	151-3	560-3	499-5	289-3	142-3	522-3
0.065	114-2	171-4	149-2	141-3	165-2	807-5	568-3	195-3	780-3	649-5	399-3	156-3	627-3	603-5	374-3	146-3	583-3
0.070	231-2	322-4	274-2	672-3	289-2	119-4	998-3	251-3	107-2	903-5	638-3	191-3	810-3	740-5	483-3	157-3	664-3
0.075	341-2	571-4	462-2	103-2	478-2	175-4	123-2	318-3	146-2	123-4	802-3	226-3	103-2	889-5	536-3	166-3	745-3
0.080	359-2	548-4	422-2	87-5	430-2	207-4	137-2	330-3	162-2	143-4	856-3	227-3	112-2	108-4	619-3	174-3	850-3
0.085	340-2	676-4	473-2	956-3	499-2	190-4	121-2	271-3	140-2	162-4	900-3	229-3	120-2	138-4	751-3	198-3	102-2
0.090	300-2	575-4	389-2	727-3	462-2	289-4	184-2	365-3	202-2	210-4	137-2	270-3	147-2	171-4	906-3	216-3	119-2
0.095	584-2	118-3	771-2	134-2	785-2	490-4	310-2	555-3	324-2	264-4	172-2	304-3	174-2	197-4	112-2	228-3	130-2
0.100	953-2	176-3	109-1	180-2	110-1	519-4	313-2	528-3	326-2	324-4	190-2	330-3	204-2	231-4	125-2	243-3	145-2
0.110	180-1	315-3	179-1	266-2	180-1	967-4	537-2	811-3	552-2	492-4	270-2	412-3	281-2	297-4	154-2	254-3	169-2
0.120	470-2	167-3	864-2	119-2	879-2	737-4	371-2	526-3	386-2	439-4	195-2	314-3	230-2	339-4	135-2	245-3	177-2
0.130	809-2	218-3	105-1	132-2	105-1	769-4	347-2	463-3	372-2	565-4	239-2	339-3	273-2	405-4	160-2	246-3	195-2
0.140	299-2	141-3	599-2	740-3	636-2	850-4	362-2	441-3	381-2	668-4	283-2	350-3	299-2	482-4	193-2	255-3	216-2
0.150	235-2	160-3	653-2	728-3	671-2	108-3	416-2	495-3	454-2	804-4	313-2	369-3	337-2	528-4	206-2	244-3	221-2
0.160	217-2	222-3	850-2	887-3	872-2	934-4	343-2	374-3	367-2	796-4	270-2	319-3	312-2	570-4	194-2	228-3	224-2
0.170	896-2	252-3	940-2	895-3	935-2	978-4	325-2	347-3	361-2	786-4	238-2	278-3	290-2	597-4	179-2	213-3	220-2
0.180	878-2	286-3	101-1	903-3	998-2	100-3	326-2	319-3	351-2	736-4	220-2	234-3	257-2	627-4	173-2	199-3	218-2
0.190	487-2	166-3	547-2	472-3	552-2	116-3	393-2	330-3	385-2	808-4	275-2	229-3	267-2	677-4	200-2	195-3	223-2
0.200	169-1	555-3	176-1	141-2	174-1	170-3	500-2	438-3	535-2	996-4	284-2	260-3	313-2	752-4	205-2	197-3	236-2
0.220	984-2	395-3	114-1	835-3	112-1	158-3	439-2	333-3	452-2	118-3	324-2	257-3	339-2	886-4	251-2	185-3	253-2
0.240	754-2	419-3	109-1	744-3	109-1	243-3	644-2	435-3	636-2	165-3	449-2	296-3	432-2	114-3	301-2	211-3	300-2
0.260	453-2	591-3	141-1	894-3	142-1	298-3	713-2	449-3	721-2	188-3	438-2	287-3	454-2	134-3	300-2	206-3	326-2
0.280	129-1	791-3	175-1	103-2	177-1	356-3	744-2	463-3	799-2	209-3	426-2	278-3	470-2	153-3	327-2	204-3	343-2
0.300	560-2	311-3	700-2	353-3	651-2	241-3	562-2	275-3	504-2	179-3	428-2	204-3	376-2	163-3	313-2	188-3	342-2
0.320	582-2	387-3	748-2	387-3	761-2	232-3	441-2	231-3	456-2	186-3	375-2	187-3	365-2	181-3	337-2	182-3	356-2
0.340	125-1	830-3	151-1	734-3	153-1	370-3	654-2	326-3	685-2	445-3	449-2	218-3	453-2	218-3	371-2	193-3	403-2
0.360	642-2	650-3	107-1	513-3	113-1	498-3	755-2	393-3	869-2	371-3	557-2	292-3	648-2	282-3	422-2	228-3	493-2
0.380	226-1	149-2	244-1	105-2	247-1	742-3	122-1	524-3	122-1	506-3	793-2	356-3	837-2	345-3	526-2	251-3	571-2
0.400	155-1	110-2	172-1	705-3	173-1	843-3	130-1	540-3	132-1	616-3	936-2	397-3	968-2	393-3	632-2	261-3	627-2
0.420	188-1	141-2	209-1	819-3	211-1	904-3	135-1	522-3	135-1	629-3	100-1	364-3	941-2	415-3	679-2	246-3	622-2
0.440	120-1	117-2	163-1	619-3	167-1	804-3	118-1	425-3	114-1	601-3	944-2	317-3	858-2	419-3	661-2	227-3	598-2
0.460	287-2	895-3	120-1	432-3	122-1	714-3	104-1	346-3	975-2	567-3	854-2	274-3	775-2	396-3	626-2	198-3	542-2
0.480	153-1	128-2	167-1	569-3	167-1	688-3	100-1	305-3	900-2	532-3	791-2	237-3	696-2	389-3	589-2	176-3	509-2
0.500	797-2	827-3	105-1	338-3	104-1	570-3	760-2	233-3	716-2	473-3	657-2	197-3	595-2	368-3	532-2	154-3	462-2
0.550	572-2	840-3	104-1	284-3	959-2	518-3	672-2	174-3	592-2	359-3	507-2	122-3	411-2	288-3	399-2	988-4	329-2
0.600	154-2	820-3	943-2	233-3	859-2	490-3	536-2	139-3	513-2	322-3	376-2	788-4	337-2	245-3	336-2	714-4	257-2
0.650	547-2	760-3	709-2	184-3	735-2	478-3	492-2	116-3	462-2	323-3	384-2	917-4	312-2	271-3	333-2	667-4	262-2
0.700	264-2	617-3	573-2	128-3	553-2	431-3	457-2	901-4	387-2	356-3	426-2	746-4	319-2	317-3	363-2	615-4	285-2
0.750	547-2	760-3	709-2	184-3	735-2	478-3	492-2	116-3	462-2	323-3	384-2	917-4	312-2	271-3	333-2	667-4	262-2
0.800	264-2	617-3	573-2	128-3	553-2	431-3	457-2	901-4	387-2	356-3	426-2	746-4	319-2	317-3	363-2	615-4	285-2
0.850	547-2	760-3	709-2	184-3	735-2	478-3	492-2	116-3	462-2	323-3	384-2	917-4	312-2	271-3	333-2	667-4	262-2
0.900	264-2	617-3	573-2	128-3	553-2	431-3	457-2	901-4	387-2	356-3	426-2	746-4	319-2	317-3	363-2	615-4	285-2
0.950	547-2	760-3	709-2	184-3	735-2	478-3	492-2	116-3	462-2	323-3	384-2	917-4	312-2	271-3	333-2	667-4	262-2
1.000	264-2	617-3	573-2	128-3	553-2	431-3	457-2	901-4	387-2	356-3	426-2	746-4	319-2	317-3	363-2	615-4	285-2

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	514-2	746-3	662-2	135-3	625-2	629-3	545-2	114-3	527-2	505-3	404-2	923-4	423-2	395-3	346-2	730-4	331-2	282-3	306-2	550-4	236-2
0.80	159-1	221-2	173-1	353-3	173-1	104-2	834-2	166-3	817-2	755-3	563-2	121-3	593-2	515-3	386-2	838-4	404-2	315-3	297-2	539-4	248-2
0.85	183-1	264-2	195-1	374-3	195-1	117-2	873-2	166-3	866-2	893-3	628-2	123-3	660-2	601-3	430-2	870-4	444-2	350-3	289-2	543-4	259-2
0.90	131-1	202-2	141-1	256-3	141-1	131-2	963-2	166-3	921-2	971-3	702-2	127-3	678-2	637-3	455-2	816-4	444-2	367-3	284-2	504-4	256-2
0.95	150-1	246-2	162-1	279-3	162-1	130-2	852-2	147-3	860-2	972-3	641-2	110-3	648-2	633-3	426-2	735-4	419-2	382-3	291-2	467-4	253-2
1.00	798-2	214-2	136-1	219-3	134-1	141-2	890-2	144-3	887-2	980-3	627-2	100-3	616-2	653-3	419-2	681-4	410-2	406-3	299-2	439-4	255-2
1.10	749-2	239-2	143-1	202-3	136-1	182-2	108-1	153-3	104-1	126-2	759-2	108-3	724-2	843-3	505-2	725-4	481-2	509-3	299-2	460-4	290-2
1.20	644-2	189-2	101-1	134-3	593-2	149-2	830-2	2106-3	784-2	117-2	644-2	842-4	615-2	848-3	446-2	619-4	444-2	541-3	298-2	427-4	283-2
1.30	576-2	177-2	876-2	107-3	859-2	111-2	549-2	675-4	539-2	863-3	473-2	526-4	417-2	694-3	402-2	435-4	335-2	521-3	314-2	378-4	251-2
1.40	488-2	151-2	670-2	789-4	678-2	102-2	456-2	536-4	461-2	683-3	417-2	358-4	306-2	578-3	373-2	321-4	259-2	504-3	310-2	326-4	226-2
1.50	705-2	184-2	773-2	836-4	770-2	953-3	440-2	433-4	399-2	715-3	330-2	327-4	299-2	542-3	330-2	257-4	227-2	496-3	301-2	282-4	207-2
1.60	205-2	904-3	398-2	361-4	355-2	730-3	317-2	292-4	287-2	626-3	310-2	252-4	246-2	568-3	309-2	238-4	223-2	504-3	296-2	249-4	198-2
1.70	200-2	934-3	408-2	330-4	345-2	845-3	353-2	299-4	312-2	752-3	310-2	267-4	277-2	608-3	302-2	231-4	235-2	529-3	292-2	225-4	195-2
1.80	392-2	136-2	477-2	432-4	478-2	101-2	361-2	320-4	353-2	854-3	292-2	272-4	298-2	730-3	295-2	229-4	244-2	570-3	289-2	217-4	199-2
1.90	215-2	139-2	485-2	394-4	460-2	111-2	404-2	316-4	368-2	835-3	327-2	239-4	276-2	710-3	292-2	211-4	234-2	622-3	290-2	213-4	205-2
2.00	304-2	154-2	574-2	395-4	485-2	120-2	455-2	307-4	377-2	997-3	362-2	256-4	313-2	757-3	304-2	204-4	237-2	683-3	292-2	211-4	214-2
2.20	664-2	245-2	693-2	518-4	700-2	160-2	503-2	339-4	458-2	119-2	409-2	255-4	342-2	101-2	329-2	225-4	289-2	815-3	297-2	210-4	233-2
2.40	263-2	192-2	443-2	342-4	504-2	171-2															

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIIG110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP S82E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

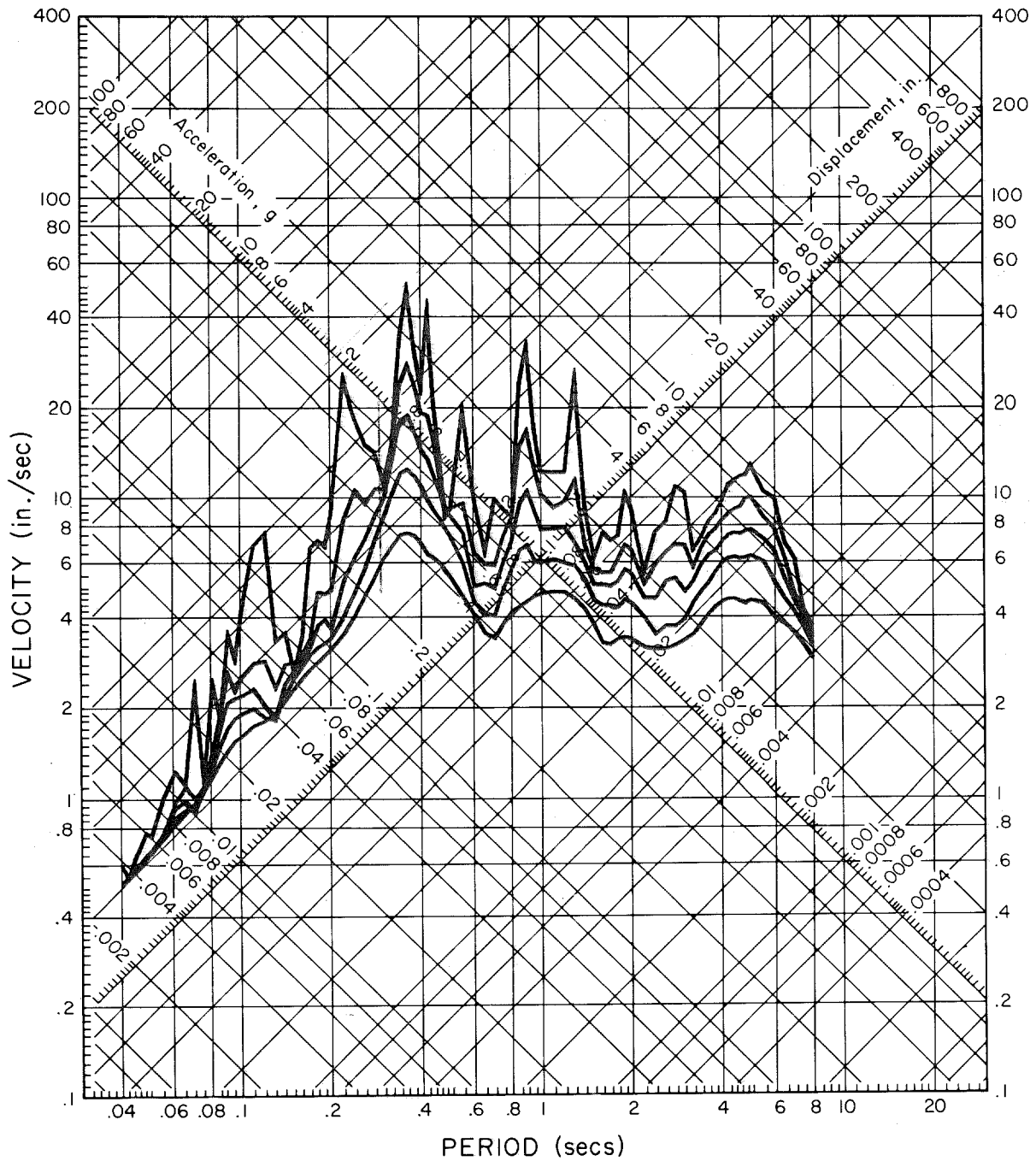


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP S82E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

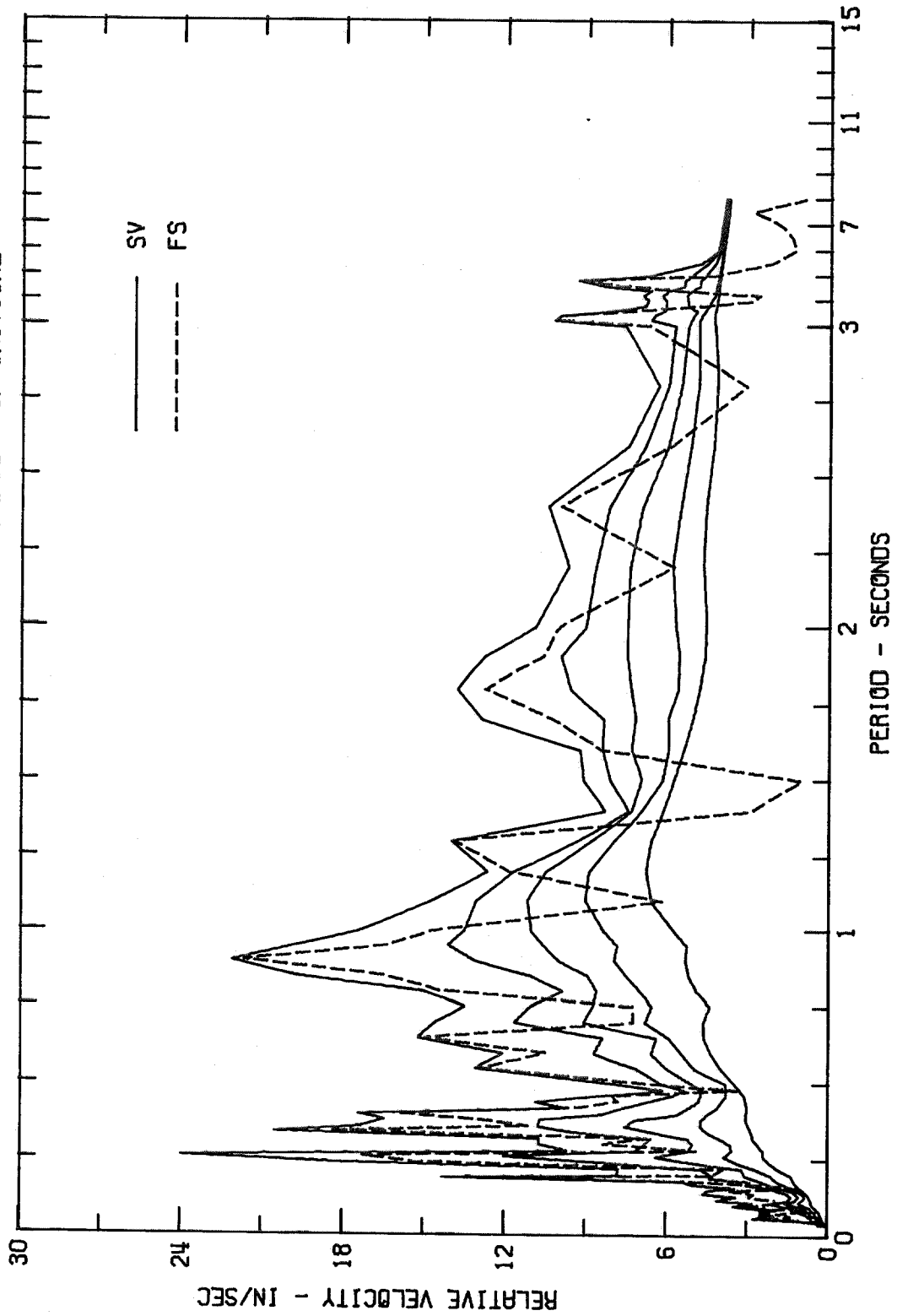
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	
0.040	120-3	380-5	166-3	243-3	557-3	337-5	880-4	215-3	529-3	336-5	917-4	215-3	528-3	333-5	897-4	214-3	528-3	333-5
0.042	103-3	367-5	130-3	212-3	549-3	373-5	105-3	216-3	559-3	373-5	102-3	216-3	558-3	372-5	990-4	215-3	557-3	369-5
0.044	111-3	450-5	187-3	237-3	643-3	421-5	105-3	222-3	602-3	414-5	108-3	218-3	591-3	411-5	109-3	217-3	587-3	407-5
0.046	528-4	519-5	224-3	250-3	709-3	454-5	125-3	219-3	620-3	452-5	120-3	218-3	618-3	450-5	122-3	218-3	615-3	447-5
0.048	885-4	599-5	262-3	266-3	784-3	503-5	156-3	223-3	659-3	494-5	147-3	219-3	647-3	492-5	141-3	218-3	644-3	490-5
0.050	246-3	604-5	380-3	247-3	759-3	545-5	209-3	223-3	685-3	530-5	185-3	217-3	667-3	534-5	161-3	219-3	671-3	535-5
0.055	371-3	912-5	771-3	308-3	104-2	681-5	250-3	230-3	778-3	687-5	230-3	232-3	785-3	674-5	210-3	227-3	770-3	660-5
0.060	719-3	119-4	114-2	338-3	124-2	948-5	370-3	269-3	993-3	904-5	316-3	258-3	947-3	842-5	267-3	239-3	938-3	799-5
0.065	565-3	116-4	819-3	282-3	112-2	115-4	491-3	280-3	112-2	104-4	434-3	252-3	101-2	970-5	344-3	235-3	982-3	945-5
0.070	160-2	264-4	232-4	553-3	237-2	113-4	619-3	237-3	102-2	102-4	492-3	214-3	921-3	105-4	401-3	220-3	943-3	110-4
0.075	540-3	138-4	790-3	250-3	115-2	135-4	554-3	246-3	113-2	134-4	495-3	244-3	112-2	130-4	442-3	237-3	109-2	130-4
0.080	246-2	312-4	243-2	499-3	245-2	184-4	792-3	295-3	144-2	174-4	630-3	280-3	137-2	165-4	525-3	265-3	129-2	154-4
0.085	100-2	254-4	153-2	360-3	188-2	261-4	111-2	372-3	193-2	235-4	885-3	333-3	174-2	207-4	643-3	293-3	153-2	182-4
0.090	164-2	514-4	309-2	649-3	359-2	380-4	161-2	479-3	265-2	302-4	110-2	384-3	211-2	250-4	768-3	318-3	174-2	210-4
0.095	185-2	447-4	266-2	506-3	295-2	350-4	131-2	398-3	231-2	332-4	114-2	380-3	219-2	284-4	822-3	327-3	187-2	238-4
0.100	301-2	683-4	421-2	698-3	429-2	409-4	171-2	417-3	257-2	354-4	122-2	364-3	222-2	308-4	887-3	323-3	193-2	260-4
0.110	619-2	124-3	692-2	104-2	709-2	503-4	225-2	423-3	287-2	411-4	144-2	353-3	235-2	355-4	104-2	305-3	203-2	311-4
0.120	580-2	148-3	728-2	105-2	779-2	556-4	261-2	393-3	291-2	394-4	163-2	279-3	236-2	360-4	107-2	256-3	188-2	351-4
0.130	214-2	703-4	320-2	425-3	340-2	491-4	176-2	296-3	237-2	387-4	132-2	235-3	187-2	383-4	106-2	233-3	185-2	405-4
0.140	264-2	806-4	263-2	420-3	361-2	635-4	160-2	332-3	285-2	544-4	178-2	285-3	244-2	503-4	120-2	262-3	226-2	479-4
0.150	131-2	634-4	241-2	288-3	265-2	684-4	194-2	311-3	286-2	653-4	174-2	298-3	273-2	612-4	157-2	281-3	256-2	566-4
0.160	238-2	902-4	304-2	360-3	354-2	787-4	226-2	315-3	309-2	755-4	213-2	302-3	296-2	716-4	189-2	288-3	281-2	656-4
0.170	494-2	187-3	633-2	664-3	693-2	942-4	290-2	334-3	348-2	875-4	240-2	309-3	323-2	829-4	223-2	294-3	306-2	744-4
0.180	315-2	210-3	703-2	668-3	734-2	141-3	434-2	447-3	494-2	109-3	330-2	346-3	383-2	929-4	256-2	297-3	324-2	831-4
0.190	382-2	211-3	653-2	554-3	658-2	147-3	375-2	418-3	488-2	121-3	314-2	345-3	401-2	101-3	272-2	288-3	334-2	924-4
0.200	662-2	292-3	884-2	747-3	917-2	159-3	465-2	404-3	499-2	118-3	295-2	307-3	372-2	111-3	278-2	293-3	349-2	102-3
0.220	236-1	899-3	257-1	189-2	256-1	303-3	818-2	642-3	865-2	188-3	497-2	404-3	539-2	144-3	304-2	305-3	412-2	126-3
0.240	972-2	712-3	177-1	126-2	186-1	414-3	102-1	736-3	108-1	418-3	618-2	447-3	647-2	189-3	406-2	342-3	495-2	159-3
0.260	150-1	638-3	154-1	965-3	154-1	404-3	968-2	617-3	978-2	309-3	704-2	473-3	747-2	258-3	487-2	380-3	599-2	200-3
0.280	805-2	650-3	146-1	848-3	145-1	490-3	101-1	640-3	110-1	397-3	777-2	518-3	893-2	331-3	624-2	438-3	744-2	249-3
0.300	338-2	546-3	109-1	621-3	114-1	518-3	101-1	589-3	108-1	486-3	928-2	561-3	101-1	424-3	774-2	491-3	889-2	306-3
0.320	105-1	799-3	153-1	798-3	156-1	774-3	144-1	779-3	152-1	700-3	125-1	698-3	137-1	544-3	986-2	559-3	106-1	358-3
0.340	308-1	191-2	352-1	169-2	353-1	132-2	238-1	117-2	245-1	988-3	172-1	876-3	182-1	670-3	121-1	606-3	123-1	415-3
0.360	441-1	291-2	508-1	230-2	508-1	162-2	283-1	129-2	284-1	111-2	195-1	883-3	193-1	731-3	133-1	592-3	127-1	445-3
0.380	221-1	189-2	312-1	133-2	312-1	146-2	242-1	103-2	241-1	103-2	174-1	727-3	169-1	732-3	130-1	535-3	121-1	459-3
0.400	171-1	150-2	238-1	962-3	236-1	125-2	206-1	803-3	196-1	943-3	156-1	603-3	148-1	708-3	121-1	464-3	111-1	453-3
0.420	411-1	288-2	429-1	167-2	431-1	128-2	204-1	741-3	192-1	922-3	154-1	544-3	137-1	670-3	115-1	394-3	100-1	441-3
0.440	199-1	148-2	226-1	785-3	212-1	112-2	177-1	590-3	160-1	844-3	138-1	451-3	120-1	648-3	106-1	347-3	925-2	449-3
0.460	122-1	105-2	144-1	507-3	143-1	896-3	134-1	432-3	122-1	778-3	118-1	379-3	106-1	634-3	953-2	314-3	866-2	450-3
0.480	212-2	669-3	100-1	297-3	876-2	720-3	106-1	319-3	942-1	704-3	102-1	314-3	921-2	612-3	914-2	276-3	801-2	443-3
0.500	593-2	745-3	111-1	304-3	936-2	748-3	106-1	306-3	941-2	703-3	994-2	287-3	883-2	596-3	889-2	251-3	749-2	437-3
0.550	184-1	176-2	201-1	595-3	201-1	858-3	118-1	289-3	981-2	678-3	980-2	232-3	775-2	537-3	819-2	186-3	614-2	415-3
0.600	967-2	953-3	984-2	271-3	998-2	633-3	766-2	180-3	663-2	492-3	652-2	141-3	516-2	434-3	629-2	128-3	454-2	393-3
0.650	355-2	691-3	689-2	161-3	668-2	630-3	536-2	152-3	609-2	546-3	560-2	133-3	528-2	432-3	523-2	108-3	418-2	371-3
0.700	946-2	112-2	100-1	234-3	100-1	673-3	666-2	140-3	604-2	566-3	599-2	118-3	508-2	459-3	545-2	981-4	412-2	387-3
0.750	55-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2	11-2

IIIG110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP S82E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
					DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT
																	DAMPING = 20 PER CENT
0.75	557-2	111-2	920-2	202-3	930-2	914-3	740-2	166-3	766-2	749-3	658-2	136-3	627-2	607-3	631-2	112-3	509-2
0.80	392-2	112-2	100-1	179-3	880-2	112-2	914-2	179-3	881-2	940-3	818-2	150-3	738-2	754-3	717-2	122-3	592-2
0.85	235-1	333-2	247-1	471-3	246-1	206-2	146-1	292-3	152-1	132-2	101-1	189-3	982-2	920-3	762-2	132-3	680-2
0.90	291-1	469-2	326-1	592-3	327-1	245-2	175-1	309-3	171-1	154-2	107-1	195-3	107-1	101-2	754-2	130-3	705-2
0.95	143-1	265-2	181-1	300-3	175-1	196-2	134-1	223-3	130-1	139-2	975-2	159-3	921-2	945-3	709-2	109-3	625-2
1.00	396-2	199-2	150-1	203-3	125-1	166-2	127-1	170-3	104-1	127-2	100-1	130-3	798-2	983-3	713-2	104-3	617-2
1.10	102-1	217-2	122-1	183-3	124-1	165-2	970-2	139-3	945-2	140-2	805-2	119-3	808-2	117-2	698-2	985-4	633-2
1.20	572-2	237-2	127-1	168-3	124-1	189-2	104-1	134-3	993-2	154-2	953-2	110-3	808-2	117-2	838-2	875-4	615-2
1.30	230-1	527-2	254-1	319-3	255-1	242-2	118-1	147-3	117-1	147-2	106-1	899-4	712-2	124-2	914-2	795-4	600-2
1.40	747-2	209-2	118-1	109-3	941-2	156-2	112-1	815-4	701-2	137-2	103-1	726-4	615-2	120-2	911-2	667-4	538-2
1.50	547-2	151-2	990-2	689-4	635-2	140-2	966-2	637-4	587-2	124-2	926-2	570-4	522-2	110-2	854-2	543-4	464-2
1.60	531-2	196-2	917-2	785-4	772-2	145-2	900-2	582-4	571-2	132-2	871-2	536-4	521-2	113-2	817-2	467-4	443-2
1.70	183-2	197-2	901-2	699-4	730-2	154-2	884-2	546-4	570-2	139-2	858-2	501-4	515-2	119-2	812-2	447-4	443-2
1.80	593-2	218-2	901-2	699-4	761-2	182-2	877-2	575-4	635-2	153-2	848-2	488-4	534-2	125-2	804-2	416-4	436-2
1.90	103-1	319-2	105-1	905-4	105-1	213-2	866-2	605-4	706-2	177-2	833-2	507-4	587-2	140-2	790-2	414-4	464-2
2.00	830-2	296-2	943-2	757-4	930-2	215-2	840-2	550-4	676-2	179-2	810-2	459-4	562-2	143-2	771-2	381-4	450-2
2.20	409-2	200-2	758-2	423-4	782-2	183-2	751-2	388-4	524-2	164-2	740-2	349-4	470-2	142-2	719-2	308-4	406-2
2.40	652-2	298-2	782-2	530-4	571-2	232-2	664-2	413-4	609-2	179-2	668-2	319-4	468-2	136-2	666-2	250-4	356-2
2.60	639-2	351-2	890-2	531-4	849-2	277-2	738-2	419-4	669-2	221-2	619-2	336-4	535-2	157-2	627-2	243-4	381-2
2.80	902-2	494-2	111-1	644-4	110-1	316-2	711-2	412-4	709-2	243-2	594-2	319-4	546-2	168-2	602-2	226-4	378-2
3.00	101-1	508-2	107-1	578-4	106-1	335-2	724-2	381-4	702-2	235-2	585-2	270-4	493-2	191-2	589-2	224-4	401-2
3.20	464-2	344-2	794-2	343-4	675-2	302-2	700-2	302-4	594-2	273-2	584-2	275-4	537-2	231-2	581-2	240-4	453-2
3.40	283-2	404-2	838-2	358-4	747-2	371-2	720-2	329-4	687-2	327-2	588-2	292-4	605-2	266-2	574-2	246-4	493-2
3.60	673-2	483-2	804-2	381-4	843-2	435-2	733-2	344-4	760-2	374-2	667-2	298-4	654-2	303-2	612-2	244-4	529-2
3.80	828-2	545-2	931-2	386-4	902-2	484-2	858-2	342-4	800-2	406-2	769-2	289-4	672-2	348-2	662-2	254-4	576-2
4.00	957-2	630-2	107-1	403-4	990-2	542-2	988-2	346-4	851-2	460-2	876-2	295-4	723-2	389-2	731-2	256-4	611-2
4.20	108-1	756-2	116-1	438-4	113-1	601-2	106-1	348-4	899-2	508-2	934-2	296-4	760-2	425-2	774-2	252-4	636-2
4.40	109-1	818-2	123-1	432-4	116-1	653-2	106-1	345-4	932-2	542-2	941-2	289-4	774-2	450-2	781-2	246-4	643-2
4.60	108-1	881-2	124-1	426-4	120-1	694-2	104-1	335-4	948-2	562-2	916-2	273-4	768-2	464-2	755-2	233-4	634-2
4.80	109-1	926-2	128-1	411-4	121-1	774-2	106-1	344-4	101-1	601-2	859-2	268-4	787-2	488-2	719-2	221-4	639-2
5.00	131-1	104-1	132-1	426-4	131-1	811-2	100-1	332-4	101-1	631-2	807-2	260-4	793-2	516-2	685-2	219-4	649-2
5.50	780-2	936-2	117-1	316-4	107-1	764-2	102-1	258-4	873-2	647-2	862-2	222-4	739-2	541-2	713-2	190-4	618-2
6.00	866-2	963-2	996-2	273-4	100-1	757-2	848-2	215-4	793-2	637-2	780-2	182-4	667-2	503-2	696-2	153-4	528-2
6.50	690-2	736-2	823-2	178-4	712-2	656-2	769-2	158-4	634-2	559-2	696-2	136-4	541-2	480-2	644-2	127-4	464-2
7.00	630-2	701-2	776-2	146-4	629-2	538-2	738-2	112-4	483-2	510-2	685-2	111-4	457-2	467-2	604-2	109-4	419-2
7.50	196-2	510-2	705-2	927-5	427-2	496-2	681-2	908-5	416-2	476-2	645-2	910-5	399-2	445-2	587-2	935-5	373-2
8.00	337-2	481-2	632-2	770-5	378-2	452-2	619-2	727-5	355-2	439-2	597-2	745-5	345-2	418-2	559-2	794-5	328-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP S08W
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

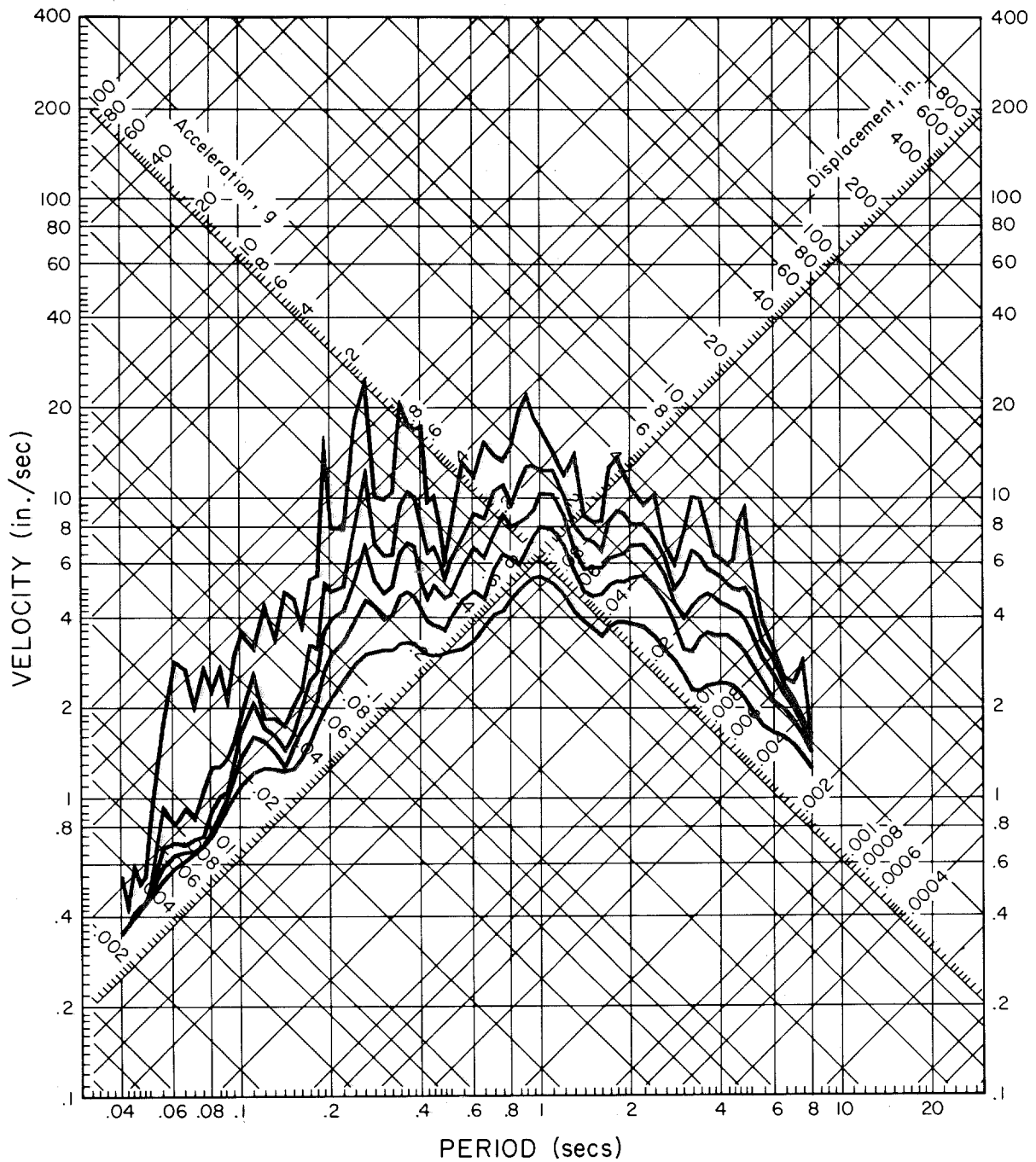


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP S08W

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



D AND G FOR SA

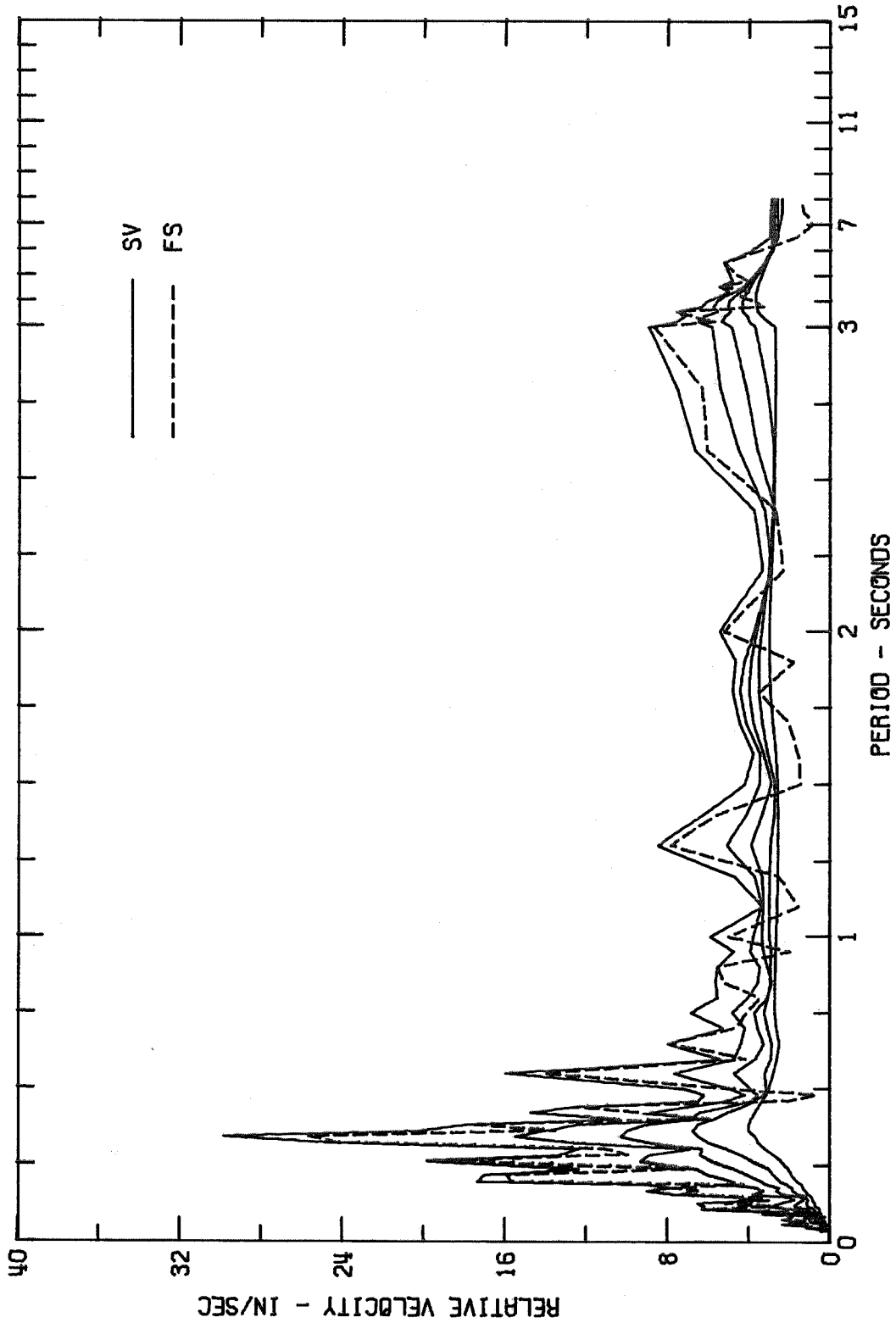
PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	261-3	343-5	343-3	219-3	540-3	226-5	987-4	144-3	355-3	223-5	989-4	143-3	351-3	224-5	990-4	144-3	353-3	224-5	913-4	145-3	353-3
0.042	989-4	287-5	148-3	166-3	429-3	251-5	117-3	145-3	376-3	250-5	112-3	144-3	374-3	251-5	110-3	146-3	376-3	250-5	101-3	146-3	374-3
0.044	262-3	409-5	385-3	216-3	584-3	287-5	140-3	152-3	411-3	282-5	129-3	149-3	403-3	280-5	125-3	148-3	401-3	277-5	112-3	148-3	395-3
0.046	365-3	375-5	372-3	181-3	513-3	316-5	151-3	153-3	432-3	312-5	142-3	151-3	427-3	311-5	143-3	150-3	425-3	306-5	123-3	150-3	418-3
0.048	250-3	418-5	418-3	185-3	547-3	339-5	221-3	150-3	444-3	345-5	185-3	153-3	452-3	345-5	166-3	153-3	451-3	338-5	138-3	152-3	442-3
0.050	616-3	691-5	652-3	282-3	868-3	403-5	263-3	165-3	507-3	380-5	223-3	155-3	478-3	382-5	190-3	156-3	480-3	370-5	152-3	154-3	466-3
0.055	112-2	155-4	143-2	525-3	177-2	811-5	602-3	273-3	927-3	595-5	365-3	203-3	679-3	513-5	261-3	174-3	586-3	462-5	193-3	159-3	528-3
0.060	245-2	271-4	280-2	771-3	284-2	773-5	619-3	220-3	810-3	673-5	395-3	190-3	705-3	613-5	296-3	175-3	642-3	554-5	227-3	159-3	580-3
0.065	135-2	277-4	254-2	672-3	268-2	953-5	691-3	230-3	921-3	719-5	462-3	173-3	695-3	680-5	376-3	165-3	657-3	634-5	263-3	157-3	613-3
0.070	147-2	224-4	198-2	467-3	201-2	947-5	774-3	197-3	850-3	810-5	644-3	169-3	727-3	737-5	458-3	156-3	662-3	724-5	293-3	152-3	650-3
0.075	191-2	323-4	252-2	587-3	270-2	126-4	892-3	230-3	106-2	889-5	662-3	164-3	745-3	832-5	480-3	151-3	697-3	822-5	316-3	151-3	689-3
0.080	137-2	289-4	213-2	461-3	226-2	161-4	101-2	258-3	127-2	116-4	639-3	186-3	914-3	988-5	469-3	161-3	776-3	956-5	325-3	155-3	751-3
0.085	755-3	367-4	254-2	520-3	271-2	172-4	110-2	243-3	127-2	137-4	737-3	195-3	101-2	120-4	558-3	169-3	887-3	113-4	375-3	163-3	835-3
0.090	113-2	302-4	189-2	381-3	211-2	195-4	111-2	247-3	136-2	150-4	814-3	188-3	105-2	145-4	618-3	184-3	101-2	133-4	416-3	171-3	928-3
0.095	284-2	459-4	299-2	520-3	303-2	235-4	123-2	266-3	156-2	201-4	884-3	229-3	133-2	218-4	873-3	206-3	118-2	154-4	486-3	178-3	101-2
0.100	293-2	564-4	352-2	577-3	354-2	298-4	160-2	308-3	187-2	264-4	110-2	270-3	165-2	278-4	840-3	228-3	136-2	175-4	541-3	186-3	110-2
0.110	199-2	552-4	281-2	466-3	315-2	452-4	220-2	386-3	258-2	363-4	161-2	312-3	207-2	280-4	108-2	243-3	160-2	213-4	454-3	187-3	121-2
0.120	195-2	837-4	414-2	595-3	438-2	351-4	148-2	251-3	184-2	327-4	122-2	236-3	171-2	295-4	991-3	212-3	154-2	241-4	633-3	178-3	126-2
0.130	293-2	699-4	339-2	423-3	338-2	381-4	135-2	231-3	184-2	333-4	108-2	201-3	160-2	293-4	863-3	179-3	142-2	259-4	702-3	161-3	125-2
0.140	275-2	108-3	466-2	565-3	486-2	388-4	146-2	203-3	174-2	323-4	115-2	170-3	145-2	283-4	924-3	150-3	127-2	274-4	786-3	149-3	123-2
0.150	365-2	110-3	446-2	501-3	462-2	488-4	189-2	221-3	204-2	393-4	135-2	178-3	164-2	355-4	114-2	163-3	148-2	300-4	919-3	142-3	125-2
0.160	113-2	949-4	344-2	379-3	373-2	593-4	210-2	237-3	232-2	518-4	172-2	209-3	203-2	435-4	135-2	177-3	171-2	351-4	105-2	145-3	137-2
0.170	243-2	144-3	508-2	513-3	535-2	878-4	304-2	310-3	324-2	669-4	220-2	239-3	247-2	507-4	163-2	184-3	187-2	417-4	117-2	153-3	154-2
0.180	525-2	158-3	545-2	499-3	551-2	907-4	293-2	285-3	316-2	757-4	247-2	240-3	264-2	610-4	190-2	194-3	213-2	505-4	126-2	166-3	176-2
0.190	134-1	443-3	143-1	125-2	146-1	157-3	493-2	447-3	521-2	109-3	286-2	311-3	361-2	809-4	206-2	232-3	267-2	599-4	133-2	177-3	198-2
0.200	426-2	254-3	779-2	651-3	800-2	155-3	428-2	395-3	489-2	126-3	310-2	319-3	397-2	958-4	213-2	242-3	301-2	687-4	139-2	179-3	215-2
0.220	389-2	277-3	776-2	585-3	791-2	178-3	474-2	377-3	508-2	148-3	322-2	317-3	423-2	116-3	270-2	254-3	334-2	866-4	187-2	190-3	247-2
0.240	153-1	698-3	182-1	124-2	182-1	311-3	812-2	551-3	815-2	204-3	494-2	361-3	535-2	150-3	338-2	276-3	393-2	106-3	217-2	199-3	280-2
0.260	173-1	100-2	240-1	152-2	243-1	501-3	120-1	756-3	121-1	287-3	644-2	443-3	695-2	190-3	389-2	294-3	459-2	124-3	240-2	198-3	301-2
0.280	488-2	450-3	964-2	588-3	101-1	312-3	712-2	410-3	701-2	236-3	518-2	312-3	530-2	195-3	359-2	257-3	437-2	137-3	240-2	189-3	308-2
0.300	834-2	475-3	107-1	539-3	994-4	307-3	683-2	352-3	645-2	230-3	502-2	265-3	482-2	189-3	365-2	221-3	396-2	149-3	262-2	178-3	311-2
0.320	669-2	534-3	107-1	534-3	105-1	332-3	655-2	331-3	652-2	260-3	520-2	258-3	510-2	208-3	402-2	212-3	408-2	158-3	279-2	169-3	312-2
0.340	184-1	112-2	205-1	991-3	207-1	517-3	951-2	455-3	955-2	358-3	653-2	314-3	662-2	256-3	452-2	221-3	473-2	178-3	287-2	169-3	329-2
0.360	111-1	102-2	172-1	806-3	178-1	607-3	107-1	477-3	106-1	409-3	757-2	323-3	714-2	280-3	475-2	226-3	490-2	189-3	295-2	161-3	331-2
0.380	130-1	103-2	164-1	731-3	170-1	614-3	106-1	435-3	101-1	419-3	712-2	297-3	694-2	283-3	472-2	204-3	469-2	198-3	306-2	152-3	328-2
0.400	159-1	111-2	174-1	709-3	174-1	517-3	831-2	329-3	812-2	335-3	556-2	213-3	526-2	271-3	448-2	176-3	426-2	199-3	303-2	140-3	313-2
0.420	930-2	651-3	980-2	377-3	974-2	442-3	756-2	258-3	662-2	310-3	518-2	179-3	464-2	261-3	411-2	155-3	391-2	202-3	302-2	128-3	302-2
0.440	779-2	716-3	108-1	378-3	102-1	485-3	674-2	256-3	693-2	359-3	482-2	191-3	513-2	265-3	396-2	142-3	379-2	210-3	306-2	121-3	300-2
0.460	804-2	615-3	840-2	297-3	841-2	454-3	575-2	219-3	621-2	356-3	471-2	174-3	487-2	279-3	380-2	135-3	374-2	220-3	314-2	117-3	301-2
0.480	336-2	472-3	611-2	209-3	618-2	412-3	531-2	183-3	539-2	356-3	468-2	160-3	466-2	279-3	380-2	126-3	365-2	233-3	329-2	115-3	305-2
0.500	672-2	622-3	799-2	254-3	782-2	490-3	621-2	201-3	616-2	380-3	509-2	156-3	478-2	317-3	381-2	133-3	399-2	245-3	348-2	113-3	309-2
0.550	129-1	116-2	131-1	392-3	132-1	655-3	715-2	221-3	748-2	518-3	601-2	176-3	592-2	402-3	500-2	139-3	460-2	276-3	399-2	104-3	315-2
0.600	104-1	113-2	120-1	322-3	118-1	855-3	871-2	242-3	896-2	656-3	659-2	187-3	687-2	469-3	545-2	135-3	492-2	321-3	436-2	990-4	337-2
0.650	150-1	159-2	152-1	386-3	154-1	893-3	839-2	216-3	863-2	659-3	636-2	160-3	637-2	479-3	591-2	118-3	463-2	388-3	462-2	103-3	375-2
0.700	723-2	155-2	145-1	324-3	139-1	118-2	116-1	248-3	106-1	859-3	911-2	180-3	771-2	651-3	683-2	139-3	585-2	57-3	467-2	106-3	410-2

111G110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP S08W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	725-2	161-2	134-1	292-3	134-1	133-2	110-1	242-3	111-1	105-2	875-2	193-3	886-2	781-3	655-2	146-3	655-2	505-3	439-2	102-3	423-2
0.80	144-1	192-2	150-1	307-3	151-1	122-2	985-2	195-3	960-2	103-2	859-2	166-3	809-2	804-3	699-2	132-3	631-2	591-3	489-2	102-3	464-2
0.85	165-1	267-2	198-1	379-3	197-1	154-2	110-1	218-3	113-1	113-2	896-2	161-3	837-2	818-3	750-2	118-3	605-2	670-3	521-2	103-3	495-2
0.90	217-1	316-2	221-1	400-3	221-1	185-2	131-1	233-3	129-1	124-2	100-1	157-3	869-2	970-3	797-2	125-3	677-2	751-3	533-2	104-3	524-2
0.95	163-1	281-2	196-1	318-3	186-1	195-2	141-1	222-3	129-1	139-2	105-1	159-3	925-2	114-2	784-2	133-3	756-2	823-3	526-2	103-3	544-2
1.00	146-1	272-2	173-1	278-3	171-1	198-2	135-1	203-3	124-1	165-2	110-1	169-3	103-1	128-2	834-2	134-3	808-2	878-3	573-2	100-3	552-2
1.10	616-2	250-2	147-1	212-3	143-1	218-2	130-1	184-3	124-1	180-2	112-1	153-3	103-1	138-2	905-2	118-3	789-2	915-3	660-2	867-4	523-2
1.20	118-1	229-2	126-1	163-3	120-1	196-2	116-1	139-3	102-1	168-2	104-1	120-3	879-2	133-2	890-2	974-4	699-2	913-3	680-2	700-4	478-2
1.30	139-1	291-2	140-1	176-3	140-1	167-2	932-2	101-3	808-2	140-2	880-2	858-4	680-2	118-2	796-2	743-4	573-2	870-3	657-2	586-4	420-2
1.40	290-2	195-2	829-2	102-3	878-2	164-2	742-2	859-4	739-2	129-2	730-2	680-4	581-2	109-2	695-2	590-4	490-2	872-3	614-2	484-4	391-2
1.50	101-2	199-2	914-2	908-4	837-2	172-2	815-2	784-4	721-2	141-2	695-2	647-4	592-2	112-2	616-2	530-4	472-2	885-3	573-2	442-4	371-2
1.60	845-2	215-2	926-2	861-4	846-2	170-2	842-2	680-4	669-2	149-2	733-2	598-4	587-2	122-2	596-2	504-4	479-2	888-3	537-2	404-4	349-2
1.70	102-1	347-2	129-1	122-3	128-1	230-2	836-2	815-4	850-2	171-2	718-2	611-4	633-2	139-2	598-2	504-4	515-2	101-2	506-2	387-4	376-2
1.80	127-1	393-2	138-1	124-3	137-1	261-2	940-2	826-4	912-2	184-2	736-2	587-4	645-2	151-2	560-2	495-4	529-2	111-2	481-2	389-4	389-2
1.90	105-1	363-2	127-1	103-3	120-1	270-2	997-2	767-4	894-2	198-2	752-2	566-4	657-2	159-2	555-2	469-4	527-2	117-2	459-2	380-4	388-2
2.00	100-1	345-2	108-1	883-4	108-1	262-2	901-2	671-4	825-2	222-2	747-2	570-4	697-2	173-2	571-2	449-4	544-2	122-2	458-2	361-4	384-2
2.20	577-2	333-2	968-2	705-4	953-2	288-2	865-2	610-4	823-2	246-2	738-2	523-4	703-2	194-2	583-2	422-4	554-2	131-2	468-2	311-4	375-2
2.40	997-2	396-2	104-1	704-4	103-1	281-2	814-2	500-4	736-2	240-2	691-2	429-4	630-2	191-2	550-2	347-4	502-2	132-2	456-2	273-4	347-2
2.60	585-2	289-2	744-2	437-4	699-2	262-2	681-2	398-4	634-2	228-2	599-2	349-4	552-2	185-2	514-2	285-4	447-2	129-2	429-2	220-4	312-2
2.80	309-2	269-2	633-2	351-4	604-2	222-2	599-2	290-4	499-2	199-2	550-2	263-4	447-2	171-2	486-2	232-4	383-2	128-2	419-2	191-4	288-2
3.00	674-2	369-2	762-2	419-4	773-2	265-2	573-2	301-4	555-2	191-2	525-2	219-4	400-2	150-2	488-2	181-4	315-2	123-2	430-2	173-4	259-2
3.20	100-1	517-2	102-1	517-4	101-1	342-2	667-2	342-4	672-2	224-2	518-2	225-4	441-2	157-2	486-2	163-4	309-2	117-2	434-2	158-4	230-2
3.40	989-2	540-2	997-2	478-4	998-2	348-2	656-2	308-4	643-2	252-2	507-2	225-4	466-2	186-2	478-2	170-4	344-2	123-2	433-2	143-4	228-2
3.60	721-2	463-2	811-2	365-4	809-2	333-2	617-2	263-4	581-2	276-2	495-2	219-4	482-2	205-2	467-2	165-4	359-2	136-2	430-2	131-4	238-2
3.80	472-2	391-2	685-2	276-4	646-2	343-2	611-2	243-4	568-2	284-2	529-2	202-4	470-2	211-2	454-2	155-4	349-2	145-2	425-2	120-4	241-2
4.00	284-2	401-2	675-2	256-4	630-2	349-2	612-2	223-4	548-2	285-2	533-2	183-4	447-2	222-2	441-2	146-4	350-2	154-2	420-2	111-4	243-2
4.20	262-2	401-2	697-2	232-4	600-2	345-2	625-2	200-4	517-2	293-2	535-2	171-4	439-2	233-2	431-2	139-4	349-2	161-2	419-2	107-4	242-2
4.40	542-2	441-2	668-2	233-4	631-2	350-2	603-2	185-4	500-2	299-2	521-2	158-4	427-2	236-2	427-2	130-4	337-2	166-2	416-2	100-4	237-2
4.60	789-2	623-2	843-2	301-4	852-2	362-2	545-2	175-4	494-2	304-2	483-2	148-4	416-2	238-2	423-2	117-4	325-2	167-2	414-2	956-5	228-2
4.80	925-2	713-2	937-2	316-4	934-2	384-2	542-2	170-4	503-2	302-2	484-2	135-4	396-2	235-2	419-2	108-4	308-2	165-2	411-2	898-5	215-2
5.00	433-2	522-2	669-2	213-4	656-2	370-2	517-2	151-4	466-2	290-2	467-2	119-4	396-2	235-2	419-2	108-4	308-2	165-2	411-2	898-5	215-2
5.50	216-2	340-2	475-2	115-4	388-2	290-2	454-2	983-5	331-2	257-2	426-2	881-5	294-2	213-2	406-2	746-5	244-2	153-2	402-2	662-5	175-2
6.00	132-2	300-2	418-2	853-5	314-2	276-2	415-2	787-5	289-2	244-2	410-2	703-5	256-2	202-2	401-2	595-5	211-2	158-2	396-2	546-5	165-2
6.50	144-2	261-2	409-2	634-5	253-2	248-2	407-2	604-5	240-2	231-2	403-2	574-5	223-2	205-2	396-2	532-5	198-2	166-2	390-2	491-5	161-2
7.00	186-2	271-2	402-2	565-5	243-2	237-2	400-2	498-5	213-2	223-2	397-2	482-5	200-2	202-2	392-2	394-5	161-2	168-2	384-2	456-5	151-2
7.50	288-2	343-2	395-2	625-5	288-2	220-2	394-2	402-5	184-2	210-2	392-2	397-5	175-2	193-2	387-2	394-5	162-2	166-2	380-2	422-5	139-2
8.00	931-3	205-2	389-2	328-5	161-2	200-2	388-2	322-5	157-2	194-2	387-2	325-5	152-2	182-2	383-2	334-5	143-2	161-2	375-2	391-5	126-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

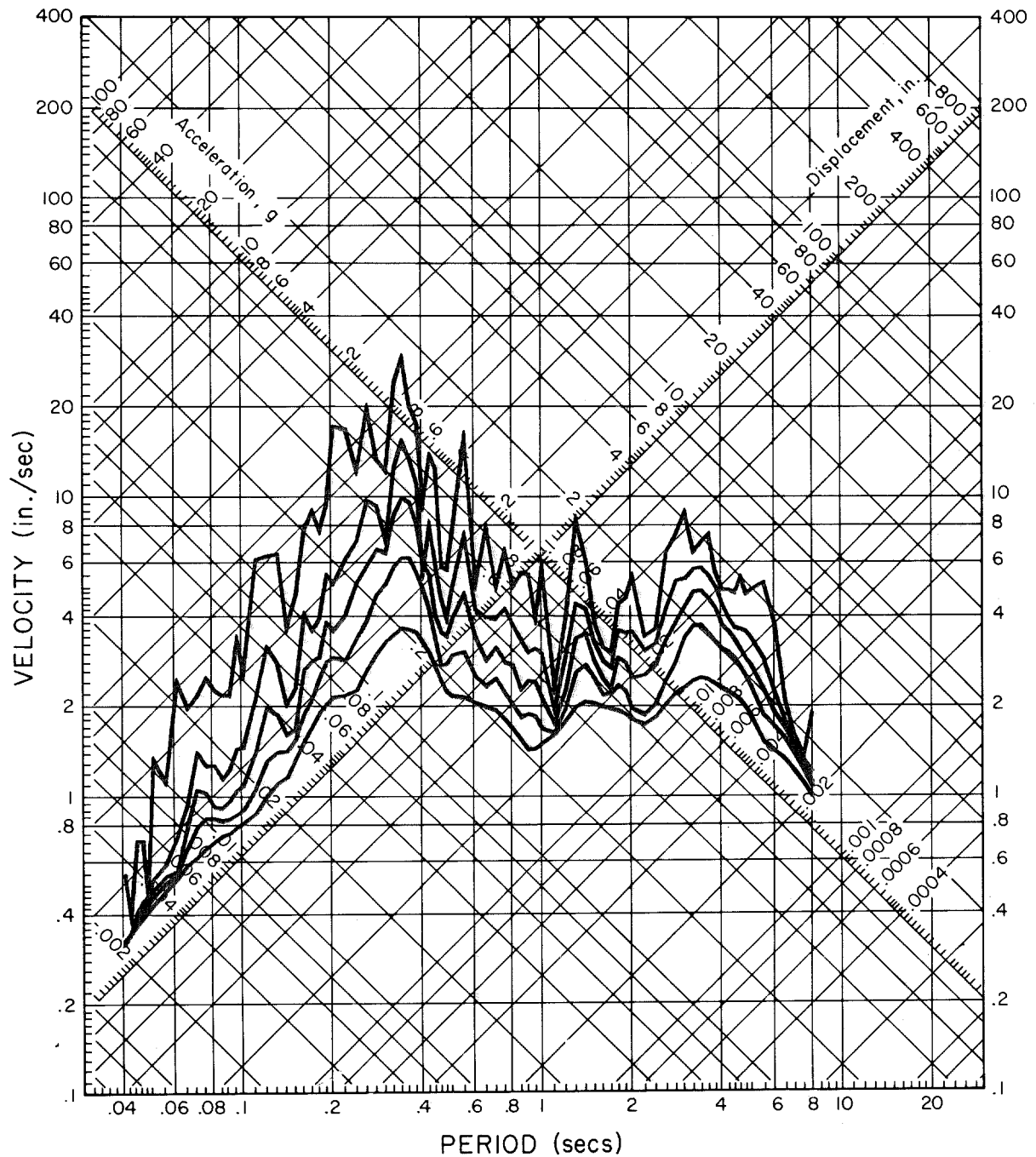


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

111G110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
 IIIG110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

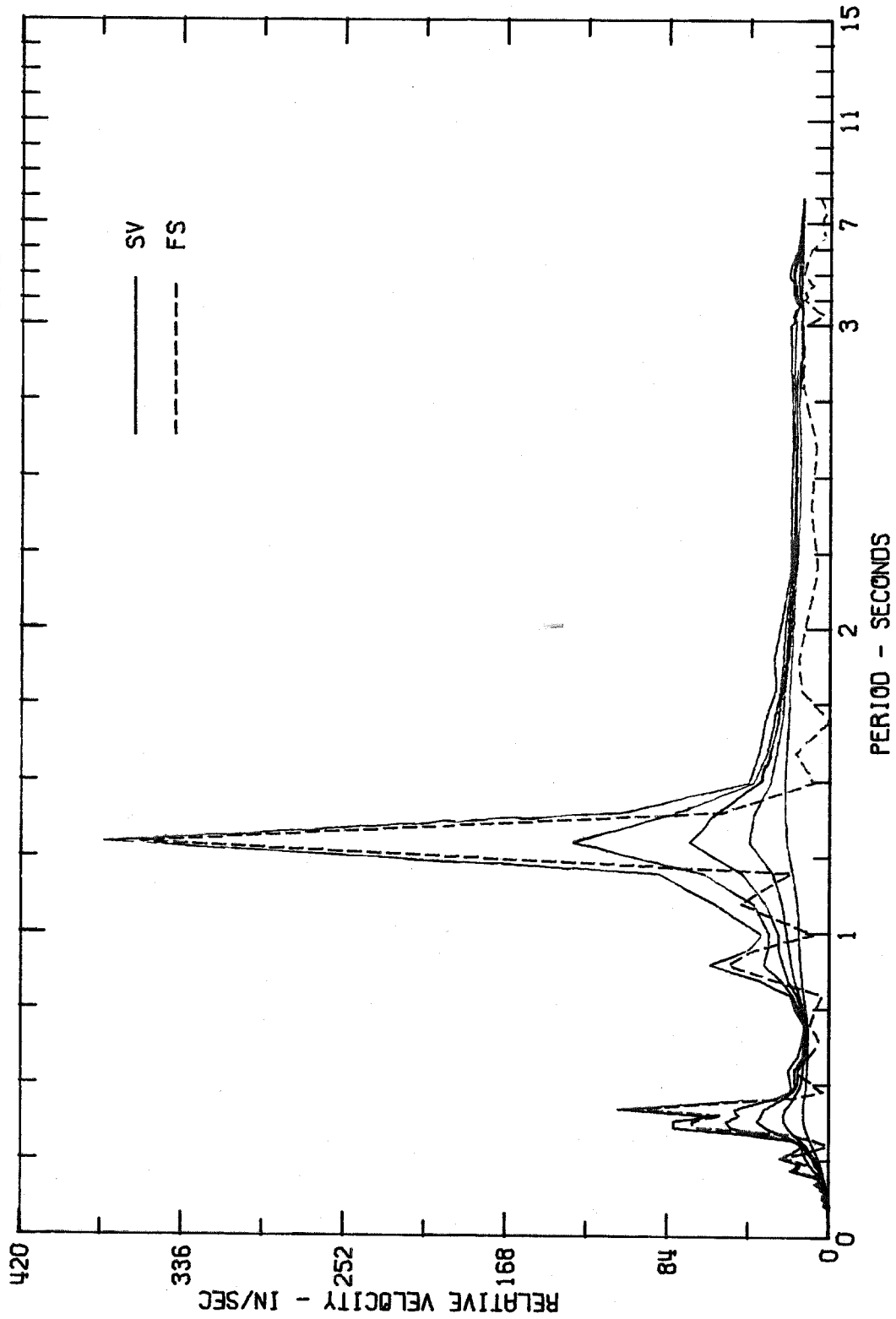
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
DAMPING = 0 PER CENT																	
DAMPING = 2 PER CENT																	
DAMPING = 5 PER CENT																	
DAMPING = 10 PER CENT																	
DAMPING = 20 PER CENT																	
0.040	371-3	348-5	443-3	222-3	547-3	204-5	127-3	130-3	321-3	323-3	208-5	854-4	134-3	327-3	210-5	780-4	136-3
0.042	832-4	265-5	272-3	154-3	397-3	234-5	122-3	136-3	351-3	353-3	236-5	967-4	138-3	353-3	234-5	865-4	137-3
0.044	326-3	498-5	479-3	263-3	711-3	288-5	150-3	152-3	412-3	394-3	267-5	112-3	142-3	382-3	261-5	959-4	139-3
0.046	659-3	519-5	686-3	251-3	710-3	328-5	184-3	159-3	449-3	429-3	302-5	131-3	146-3	412-3	288-5	105-3	141-3
0.048	623-4	350-5	351-3	155-3	459-3	358-5	217-3	159-3	468-3	460-3	337-5	149-3	149-3	441-3	317-5	118-3	142-3
0.050	104-2	107-4	116-2	441-3	135-2	423-5	290-3	173-3	532-3	488-3	369-5	167-3	151-3	464-3	346-5	130-3	144-3
0.055	922-3	986-5	110-2	333-3	112-2	520-5	325-3	175-3	594-3	474-5	541-3	202-3	152-3	512-3	423-5	157-3	144-3
0.060	195-2	232-4	236-2	661-3	243-2	701-5	513-3	198-3	734-3	537-5	562-3	239-3	150-3	550-3	507-5	186-3	148-3
0.065	555-3	205-4	159-2	498-3	198-2	986-5	666-3	238-3	954-3	823-5	699-5	319-3	171-3	676-3	610-5	220-3	151-3
0.070	126-2	245-4	185-2	513-3	220-2	158-4	101-2	330-3	422-3	118-4	882-5	406-3	186-3	791-3	697-5	259-3	151-3
0.075	174-2	300-4	237-2	545-3	251-2	153-4	102-2	277-3	128-2	124-4	101-4	496-3	186-3	847-3	800-5	321-3	148-3
0.080	134-2	291-4	206-2	465-3	228-2	164-4	107-2	262-3	129-2	118-4	107-4	676-3	190-3	841-3	902-5	367-3	148-3
0.085	218-3	297-4	186-2	421-3	220-2	157-4	881-3	222-3	116-2	124-4	112-4	555-3	161-3	830-3	999-5	407-3	144-3
0.090	852-3	313-4	183-2	396-3	219-2	181-4	880-3	229-3	126-2	140-4	120-4	649-3	177-3	977-3	108-4	440-3	142-3
0.095	319-2	509-4	334-2	577-3	337-2	222-4	113-2	252-3	146-2	160-4	132-4	620-3	150-3	874-3	119-4	477-3	141-3
0.100	830-3	414-4	227-2	424-3	260-2	236-4	126-2	240-3	148-2	175-4	110-2	144-4	666-3	150-3	129-4	514-3	138-3
0.110	631-2	110-3	633-2	930-3	628-2	374-4	185-2	315-3	214-2	250-4	142-2	189-4	834-3	163-3	107-2	154-4	559-3
0.120	290-2	123-3	621-2	876-3	646-2	609-4	302-2	432-3	319-2	379-4	178-2	267-3	183-3	133-2	193-4	685-3	144-3
0.130	516-2	135-3	655-2	820-3	655-2	581-4	240-2	352-3	280-2	391-4	163-2	235-3	189-2	295-4	117-2	181-3	145-3
0.140	298-2	823-4	365-2	429-3	369-2	454-4	173-2	233-3	204-2	362-4	170-2	377-4	171-3	157-2	326-4	939-3	152-3
0.160	734-2	201-3	787-2	806-3	792-2	105-3	387-2	420-3	413-2	684-4	237-2	276-3	268-2	195-3	190-2	396-4	110-2
0.170	648-2	246-3	904-2	873-3	912-2	984-4	325-2	348-3	363-2	772-4	267-2	272-3	285-2	576-4	186-2	469-4	123-2
0.180	779-2	223-3	783-2	706-3	781-2	114-3	371-2	362-3	399-2	843-4	255-2	265-3	294-2	213-2	246-3	284-2	185-3
0.190	424-2	290-3	912-2	822-3	959-2	168-3	494-2	476-3	557-2	116-3	338-2	293-3	362-2	935-4	246-2	241-3	293-2
0.200	157-1	557-3	174-1	142-2	175-1	165-3	470-2	424-3	521-2	115-3	143-3	404-2	307-3	410-2	100-3	276-2	769-4
0.220	159-1	599-3	169-1	126-2	171-1	221-3	603-2	465-3	631-2	143-3	143-3	404-2	307-3	410-2	100-3	276-2	769-4
0.240	690-2	474-3	123-1	842-3	124-1	278-3	659-2	493-3	729-2	200-3	474-2	359-3	525-2	130-3	300-2	238-3	341-2
0.260	195-1	829-3	199-1	125-2	200-1	408-3	939-2	617-3	987-2	249-3	585-2	377-3	602-2	163-3	385-2	250-3	395-2
0.280	994-2	602-3	132-1	785-3	135-1	423-3	882-2	551-3	950-2	303-3	642-2	393-3	680-2	212-3	440-2	283-3	477-2
0.300	111-1	590-3	122-1	670-3	123-1	346-3	684-2	396-3	725-2	315-3	628-2	357-3	660-2	248-3	513-2	285-3	520-2
0.320	243-1	125-2	246-1	125-2	246-1	656-3	124-1	657-3	128-1	455-3	886-2	455-3	895-2	302-3	599-2	302-3	594-2
0.340	257-1	161-2	298-1	142-2	297-1	847-3	155-1	753-3	156-1	545-3	103-1	488-3	100-1	344-3	649-2	306-3	637-2
0.360	135-1	116-2	201-1	918-3	203-1	776-3	140-1	612-3	135-1	557-3	999-2	443-3	972-2	364-3	676-2	290-3	636-2
0.380	177-1	107-2	178-1	764-3	178-1	681-3	123-1	488-3	112-1	494-3	900-2	350-3	816-2	343-3	648-2	252-3	567-2
0.400	589-2	614-3	103-1	393-3	965-2	363-3	618-2	231-3	570-2	386-3	685-2	246-3	606-2	316-3	564-2	206-3	497-2
0.420	946-2	938-3	147-1	543-3	140-1	546-3	888-2	318-3	810-2	372-3	637-2	218-3	556-2	282-3	502-2	168-3	423-2
0.440	126-1	882-3	126-1	466-3	126-1	425-3	705-2	225-3	607-2	285-3	513-2	153-3	408-2	239-3	428-2	128-3	341-2
0.460	200-2	432-3	640-2	208-3	590-2	340-3	510-2	164-3	464-2	262-3	387-2	128-3	358-2	202-3	367-2	101-3	276-2
0.480	677-3	444-3	617-2	197-3	581-2	303-3	419-2	134-3	396-2	264-3	355-2	117-3	346-2	213-3	325-2	957-4	279-2
0.500	503-2	615-3	724-2	251-3	773-2	397-3	493-2	162-3	500-2	314-3	394-2	128-3	395-2	237-3	313-2	981-4	298-2
0.550	141-1	139-2	160-1	471-3	159-1	662-3	768-2	224-3	756-2	421-3	474-2	143-3	481-2	267-3	323-2	921-4	306-2
0.600	412-2	495-3	537-2	140-3	519-2	405-3	468-2	115-3	424-2	327-3	365-2	933-4	342-2	241-3	291-2	700-4	252-2
0.650	790-2	831-3	803-2	201-3	803-2	415-3	438-2	100-3	401-2	297-3	325-2	726-4	287-2	243-3	284-2	608-4	235-2
0.700	467-2	563-3	527-2	117-3	505-2	442-3	418-2	921-4	397-2	354-3	358-2	746-4	317-2	278-3	309-2	600-4	249-2

111G110 71.032.0 JET PROPULSION LAB., BASEMENT, PASADENA, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	411-2	799-3	687-2	145-3	670-2	512-3	482-2	929-4	429-4	337-3	375-2	616-4	283-2	266-3	324-2	502-4	223-2	217-3	273-2	469-4	182-2
0.80	345-2	645-3	554-2	103-3	507-2	480-3	404-2	771-4	377-2	351-3	309-2	567-4	276-2	258-3	304-2	429-4	203-2	215-3	275-2	409-4	169-2
0.85	528-2	765-3	566-2	108-3	565-2	454-3	354-2	643-4	335-2	310-3	286-2	441-4	229-2	250-3	292-2	363-4	184-2	212-3	273-2	361-4	156-2
0.90	554-2	797-3	555-2	100-3	556-2	435-3	347-2	553-4	304-2	352-3	309-2	450-4	245-2	272-3	292-2	357-4	190-2	208-3	271-2	321-4	145-2
0.95	198-2	599-3	472-2	679-4	396-2	474-3	353-2	538-4	314-2	365-3	329-2	417-4	241-2	281-3	289-2	331-4	186-2	221-3	269-2	288-4	146-2
1.00	500-2	937-3	589-2	958-4	588-2	479-3	379-2	491-4	301-2	338-3	339-2	348-4	212-2	271-3	300-2	292-4	170-2	241-3	266-2	270-4	151-2
1.10	154-2	407-3	335-2	344-4	232-2	341-3	336-2	289-4	194-2	308-3	328-2	264-4	176-2	288-3	303-2	256-4	164-2	284-3	261-2	263-4	162-2
1.20	259-2	776-3	472-2	551-4	406-2	570-3	375-2	405-4	298-2	438-3	336-2	315-4	229-2	378-3	298-2	280-4	198-2	344-3	259-2	268-4	180-2
1.30	785-2	175-2	850-2	106-3	847-2	921-3	509-2	557-4	445-2	704-3	390-2	429-4	340-2	540-3	293-2	335-4	261-2	414-3	259-2	279-4	200-2
1.40	548-2	139-2	623-2	727-4	625-2	951-3	408-2	496-4	427-2	786-3	332-2	412-4	352-2	616-3	275-2	332-4	276-2	464-3	259-2	274-4	208-2
1.50	144-2	912-3	417-2	414-4	382-2	779-3	344-2	354-4	326-2	676-3	290-2	309-4	283-2	591-3	275-2	275-4	247-2	490-3	261-2	255-4	205-2
1.60	160-2	808-3	379-2	322-4	317-2	726-3	344-2	291-4	285-2	633-3	330-2	258-4	248-2	558-3	308-2	229-4	219-2	510-3	271-2	235-4	200-2
1.70	207-2	827-3	449-2	292-4	305-2	730-3	417-2	259-4	269-2	622-3	381-2	227-4	230-2	604-3	339-2	219-4	223-2	534-3	287-2	219-4	197-2
1.80	351-2	127-2	481-2	402-4	445-2	103-2	445-2	328-4	362-2	836-3	403-2	266-4	292-2	679-3	354-2	220-4	237-2	557-3	298-2	204-4	194-2
1.90	181-2	140-2	467-2	398-4	465-2	107-2	422-2	304-4	355-2	854-3	391-2	243-4	282-2	688-3	352-2	201-4	227-2	572-3	301-2	188-4	189-2
2.00	524-2	175-2	547-2	447-4	550-2	114-2	374-2	292-4	358-2	796-3	360-2	204-4	250-2	628-3	337-2	166-4	197-2	581-3	300-2	172-4	182-2
2.20	234-2	121-2	333-2	255-4	345-2	108-2	290-2	229-4	309-2	896-3	298-2	190-4	256-2	661-3	301-2	144-4	188-2	614-3	289-2	152-4	175-2
2.40	272-2	140-2	379-2	249-4	367-2	124-2	324-2	221-4	327-2	105-2	275-2	188-4	276-2	784-3	281-2	143-4	205-2	710-3	279-2	148-4	186-2
2.60	608-2	275-2	668-2	417-4	666-2	178-2	453-2	269-4	430-2	140-2	362-2	212-4	338-2	102-2	276-2	161-4	247-2	850-3	273-2	150-4	205-2
2.80	634-2	342-2	756-2	446-4	767-2	236-2	547-2	308-4	531-2	172-2	419-2	226-4	387-2	126-2	314-2	169-4	284-2	995-3	269-2	151-4	223-2
3.00	868-2	431-2	897-2	490-4	903-2	258-2	587-2	293-4	540-2	208-2	488-2	239-4	437-2	164-2	375-2	192-4	344-2	111-2	275-2	146-4	233-2
3.20	568-2	338-2	754-2	338-4	664-2	297-2	653-2	297-4	583-2	248-2	536-2	249-4	487-2	191-2	402-2	195-4	375-2	124-2	309-2	142-4	245-2
3.40	684-2	388-2	714-2	343-4	717-2	318-2	623-2	282-4	588-2	266-2	522-2	237-4	492-2	204-2	410-2	185-4	377-2	135-2	337-2	133-4	250-2
3.60	759-2	435-2	759-2	343-4	760-2	316-2	553-2	249-4	552-2	264-2	490-2	209-4	462-2	203-2	433-2	167-4	355-2	141-2	356-2	123-4	247-2
3.80	328-2	341-2	634-2	242-4	565-2	305-2	578-2	216-4	504-2	259-2	504-2	184-4	428-2	200-2	439-2	146-4	331-2	144-2	366-2	116-4	239-2
4.00	383-2	315-2	601-2	201-4	495-2	282-2	558-2	180-4	443-2	240-2	499-2	155-4	378-2	199-2	434-2	130-4	313-2	147-2	370-2	107-4	231-2
4.20	444-2	330-2	547-2	191-4	494-2	265-2	516-2	154-4	397-2	240-2	472-2	141-4	359-2	204-2	423-2	122-4	305-2	150-2	369-2	977-5	224-2
4.40	402-2	338-2	499-2	178-4	483-2	258-2	465-2	137-4	369-2	236-2	435-2	127-4	337-2	203-2	410-2	113-4	290-2	153-2	364-2	896-5	219-2
4.60	544-2	399-2	551-2	192-4	545-2	267-2	426-2	129-4	365-2	229-2	414-2	113-4	313-2	199-2	395-2	103-4	272-2	154-2	357-2	857-5	210-2
4.80	407-2	366-2	480-2	162-4	479-2	275-2	402-2	122-4	360-2	222-2	394-2	994-5	290-2	192-2	379-2	931-5	252-2	152-2	348-2	808-5	198-2
5.00	456-2	395-2	493-2	161-4	496-2	270-2	379-2	110-4	340-2	218-2	373-2	901-5	275-2	186-2	363-2	829-5	234-2	148-2	338-2	754-5	186-2
5.50	523-2	458-2	524-2	154-4	523-2	254-2	325-2	861-5	290-2	201-2	324-2	691-5	230-2	164-2	323-2	602-5	187-2	135-2	313-2	616-5	154-2
6.00	340-2	362-2	381-2	102-4	379-2	213-2	291-2	608-5	223-2	182-2	281-2	535-5	190-2	165-2	286-2	511-5	173-2	137-2	289-2	540-5	144-2
6.50	165-2	217-2	297-2	525-5	209-2	185-2	287-2	454-5	179-2	176-2	274-2	447-5	170-2	162-2	256-2	440-5	157-2	139-2	267-2	472-5	134-2
7.00	888-3	178-2	298-2	372-5	160-2	173-2	290-2	366-5	155-2	166-2	278-2	368-5	149-2	156-2	261-2	375-5	140-2	137-2	249-2	412-5	123-2
7.50	132-2	165-2	295-2	300-5	138-2	159-2	288-2	293-5	133-2	155-2	278-2	301-5	130-2	147-2	263-2	318-5	123-2	133-2	236-2	361-5	111-2
8.00	148-2	243-2	289-2	388-5	191-2	156-2	283-2	249-5	122-2	143-2	275-2	248-5	112-2	138-2	262-2	270-5	109-2	128-2	239-2	319-5	101-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP S82E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

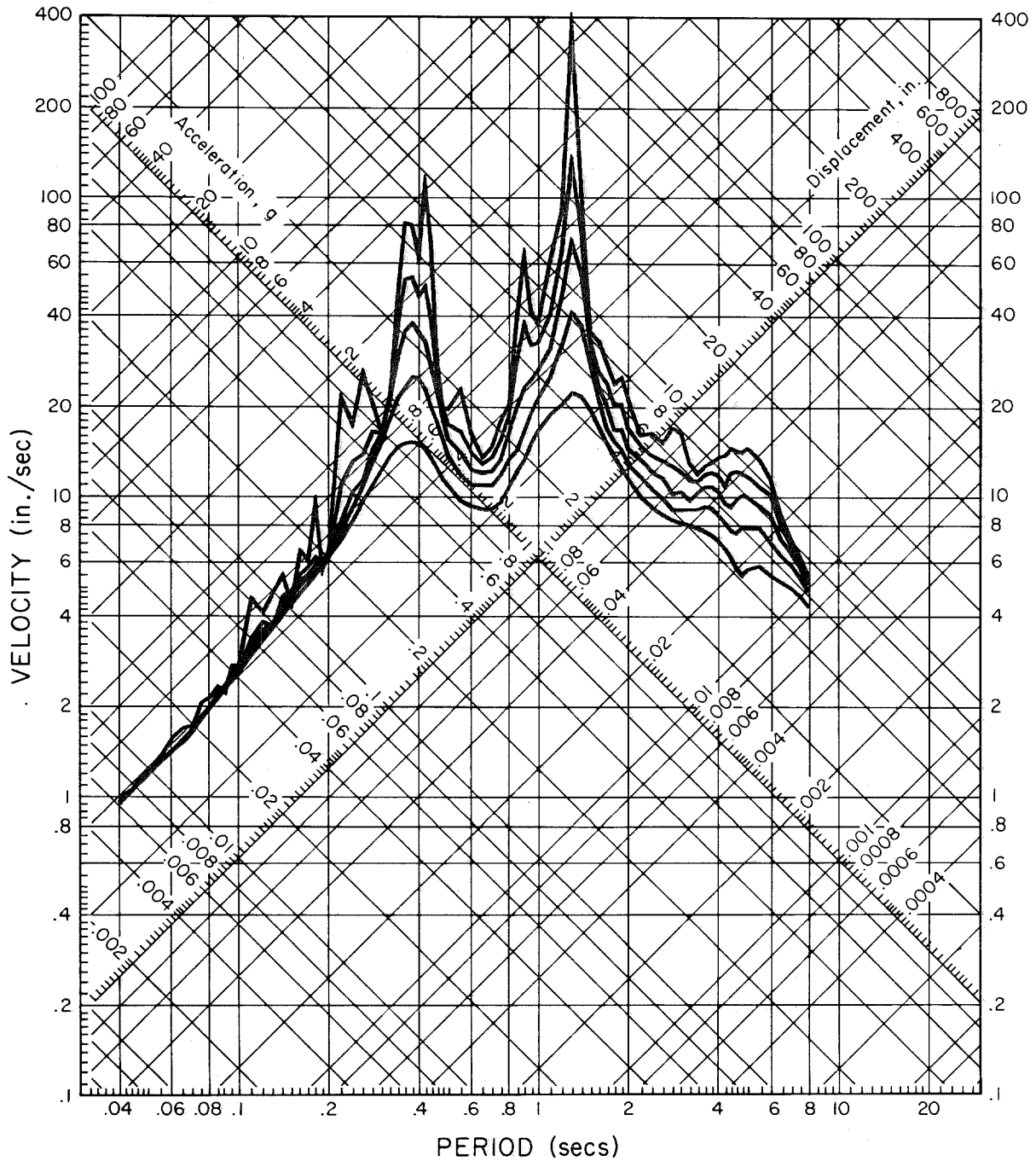


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP S82E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIG111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP S82E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT										DAMPING = 2 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV								
0.040	181-4	629-5	120-3	402-3	989-3	613-5	977-4	392-3	964-3	611-5	999-4	390-3	960-3	610-5	999-4	389-3	958-3	608-5	978-4	389-3	955-3	608-5	978-4	389-3	955-3	608-5	978-4	389-3	955-3	608-5	978-4	389-3	955-3	608-5	978-4	389-3	955-3	608-5	978-4	389-3	955-3								
0.042	539-4	687-5	120-3	398-3	102-2	675-5	111-3	391-3	101-2	674-5	112-3	390-3	100-2	673-5	110-3	390-3	100-2	671-5	108-3	389-3	100-2	671-5	108-3	389-3	100-2	671-5	108-3	389-3	100-2	671-5	108-3	389-3	100-2	671-5	108-3	389-3	100-2	671-5	108-3	389-3	100-2	671-5	108-3	389-3					
0.044	121-4	737-5	158-3	389-3	105-2	735-5	134-3	388-3	105-2	734-5	127-3	390-3	105-2	733-5	123-3	390-3	105-2	731-5	120-3	389-3	105-2	731-5	120-3	389-3	105-2	731-5	120-3	389-3	105-2	731-5	120-3	389-3	105-2	731-5	120-3	389-3	105-2	731-5	120-3	389-3	105-2	731-5	120-3	389-3					
0.046	688-5	833-5	159-3	402-3	113-2	816-5	150-3	394-3	111-2	813-5	142-3	392-3	111-2	809-5	136-3	391-3	110-2	806-5	133-3	390-3	110-2	806-5	133-3	390-3	110-2	806-5	133-3	390-3	110-2	806-5	133-3	390-3	110-2	806-5	133-3	390-3	110-2	806-5	133-3	390-3	110-2	806-5	133-3	390-3					
0.048	561-4	909-5	174-3	403-3	118-2	893-5	158-3	396-3	116-2	887-5	154-3	394-3	116-2	882-5	150-3	392-3	115-2	878-5	146-3	390-3	114-2	878-5	146-3	390-3	114-2	878-5	146-3	390-3	114-2	878-5	146-3	390-3	114-2	878-5	146-3	390-3	114-2	878-5	146-3	390-3	114-2	878-5	146-3	390-3					
0.050	710-4	973-5	186-3	398-3	122-2	966-5	168-3	395-3	121-2	962-5	166-3	393-3	120-2	957-5	163-3	391-3	120-2	953-5	159-3	390-3	119-2	953-5	159-3	390-3	119-2	953-5	159-3	390-3	119-2	953-5	159-3	390-3	119-2	953-5	159-3	390-3	119-2	953-5	159-3	390-3	119-2	953-5	159-3	390-3					
0.055	696-4	121-4	261-3	410-3	138-2	116-4	212-3	394-3	133-2	115-4	202-3	391-3	132-2	115-4	199-3	390-3	131-2	115-4	196-3	390-3	131-2	115-4	196-3	390-3	131-2	115-4	196-3	390-3	131-2	115-4	196-3	390-3	131-2	115-4	196-3	390-3	131-2	115-4	196-3	390-3	131-2	115-4	196-3	390-3					
0.060	303-3	152-4	416-3	431-3	159-2	137-4	248-3	391-3	144-2	137-4	243-3	389-3	143-2	136-4	241-3	389-3	143-2	137-4	236-3	391-3	143-2	137-4	236-3	391-3	143-2	137-4	236-3	391-3	143-2	137-4	236-3	391-3	143-2	137-4	236-3	391-3	143-2	137-4	236-3	391-3	143-2	137-4	236-3	391-3					
0.065	157-3	176-4	387-3	428-3	170-2	157-4	306-3	381-3	152-2	158-4	300-3	383-3	153-2	160-4	291-3	387-3	154-2	161-4	281-3	392-3	156-2	161-4	281-3	392-3	156-2	161-4	281-3	392-3	156-2	161-4	281-3	392-3	156-2	161-4	281-3	392-3	156-2	161-4	281-3	392-3	156-2	161-4	281-3	392-3					
0.070	304-3	193-4	468-3	403-3	173-2	185-4	367-3	386-3	166-2	186-4	353-3	388-3	167-2	187-4	343-3	390-3	168-2	188-4	330-3	395-3	169-2	188-4	330-3	395-3	169-2	188-4	330-3	395-3	169-2	188-4	330-3	395-3	169-2	188-4	330-3	395-3	169-2	188-4	330-3	395-3	169-2	188-4	330-3	395-3					
0.075	279-3	246-4	563-3	447-3	206-2	220-4	420-3	400-3	184-2	219-4	402-3	399-3	184-2	218-4	395-3	398-3	183-2	218-4	381-3	399-3	183-2	218-4	381-3	399-3	183-2	218-4	381-3	399-3	183-2	218-4	381-3	399-3	183-2	218-4	381-3	399-3	183-2	218-4	381-3	399-3	183-2	218-4	381-3	399-3					
0.080	168-3	272-4	459-3	435-3	214-2	254-4	448-3	405-3	199-2	254-4	457-3	407-3	200-2	253-4	451-3	406-3	199-2	252-4	434-3	405-3	198-2	252-4	434-3	405-3	198-2	252-4	434-3	405-3	198-2	252-4	434-3	405-3	198-2	252-4	434-3	405-3	198-2	252-4	434-3	405-3	198-2	252-4	434-3	405-3					
0.085	514-3	316-4	664-3	447-3	233-2	300-4	547-3	425-3	222-2	296-4	527-3	419-3	218-2	292-4	511-3	415-3	216-2	289-4	489-3	412-3	213-2	289-4	489-3	412-3	213-2	289-4	489-3	412-3	213-2	289-4	489-3	412-3	213-2	289-4	489-3	412-3	213-2	289-4	489-3	412-3	213-2	289-4	489-3	412-3					
0.090	365-3	317-4	621-3	401-3	221-2	336-4	607-3	424-3	234-2	338-4	589-3	428-3	236-2	335-4	570-3	423-3	234-2	329-4	547-3	418-3	229-2	329-4	547-3	418-3	229-2	329-4	547-3	418-3	229-2	329-4	547-3	418-3	229-2	329-4	547-3	418-3	229-2	329-4	547-3	418-3	229-2	329-4	547-3	418-3					
0.095	580-3	416-4	807-3	472-3	275-2	401-4	638-3	454-3	265-2	388-4	637-3	439-3	256-2	381-4	633-3	432-3	252-2	372-4	612-3	425-3	246-2	372-4	612-3	425-3	246-2	372-4	612-3	425-3	246-2	372-4	612-3	425-3	246-2	372-4	612-3	425-3	246-2	372-4	612-3	425-3	246-2	372-4	612-3	425-3					
0.100	585-3	434-4	885-3	444-3	272-2	416-4	666-3	425-3	261-2	427-4	693-3	436-3	268-2	428-4	700-3	437-3	269-2	417-4	670-3	431-3	262-2	417-4	670-3	431-3	262-2	417-4	670-3	431-3	262-2	417-4	670-3	431-3	262-2	417-4	670-3	431-3	262-2	417-4	670-3	431-3	262-2	417-4	670-3	431-3					
0.110	277-2	807-4	279-2	582-3	461-2	595-4	113-2	501-3	339-2	565-4	982-3	476-3	322-2	544-4	887-3	461-3	310-2	520-4	816-3	446-3	297-2	520-4	816-3	446-3	297-2	520-4	816-3	446-3	297-2	520-4	816-3	446-3	297-2	520-4	816-3	446-3	297-2	520-4	816-3	446-3	297-2	520-4	816-3	446-3					
0.120	126-2	787-4	175-2	559-3	412-2	734-4	128-2	521-3	384-2	689-4	101-2	487-3	360-2	663-4	983-3	473-3	347-2	636-4	958-3	457-3	333-2	636-4	958-3	457-3	333-2	636-4	958-3	457-3	333-2	636-4	958-3	457-3	333-2	636-4	958-3	457-3	333-2	636-4	958-3	457-3	333-2	636-4	958-3	457-3					
0.130	158-2	100-3	299-2	605-3	483-2	762-4	130-2	461-3	368-2	785-4	117-2	475-3	379-2	791-4	113-2	478-3	382-2	760-4	111-2	466-3	367-2	760-4	111-2	466-3	367-2	760-4	111-2	466-3	367-2	760-4	111-2	466-3	367-2	760-4	111-2	466-3	367-2	760-4	111-2	466-3	367-2	760-4	111-2	466-3					
0.140	262-2	123-3	369-2	644-3	554-2	104-3	195-2	544-3	468-2	994-4	152-2	518-3	446-2	951-4	136-2	498-3	427-2	899-4	128-2	478-3	403-2	899-4	128-2	478-3	403-2	899-4	128-2	478-3	403-2	899-4	128-2	478-3	403-2	899-4	128-2	478-3	403-2	899-4	128-2	478-3	403-2	899-4	128-2	478-3					
0.150	183-2	104-3	217-2	477-3	439-2	117-3	200-2	533-3	491-2	115-3	193-2	528-3	484-2	111-3	172-2	511-3	467-2	105-3	445-2	488-3	442-2	105-3	445-2	488-3	442-2	105-3	445-2	488-3	442-2	105-3	445-2	488-3	442-2	105-3	445-2	488-3	442-2	105-3	445-2	488-3	442-2	105-3	445-2	488-3					
0.160	307-2	169-3	393-2	675-3	603-2	141-3	272-2	563-3	553-2	134-3	237-2	535-3	526-2	129-3	206-2	516-3	507-2	121-3	172-2	496-3	478-2	121-3	172-2	496-3	478-2	121-3	172-2	496-3	478-2	121-3	172-2	496-3	478-2	121-3	172-2	496-3	478-2	121-3	172-2	496-3	478-2	121-3	172-2	496-3					
0.170	349-2	165-3	466-2	584-3	610-2	158-3	328-2	560-3	585-2	149-3	270-2	529-3	552-2	146-3	241-2	521																																	

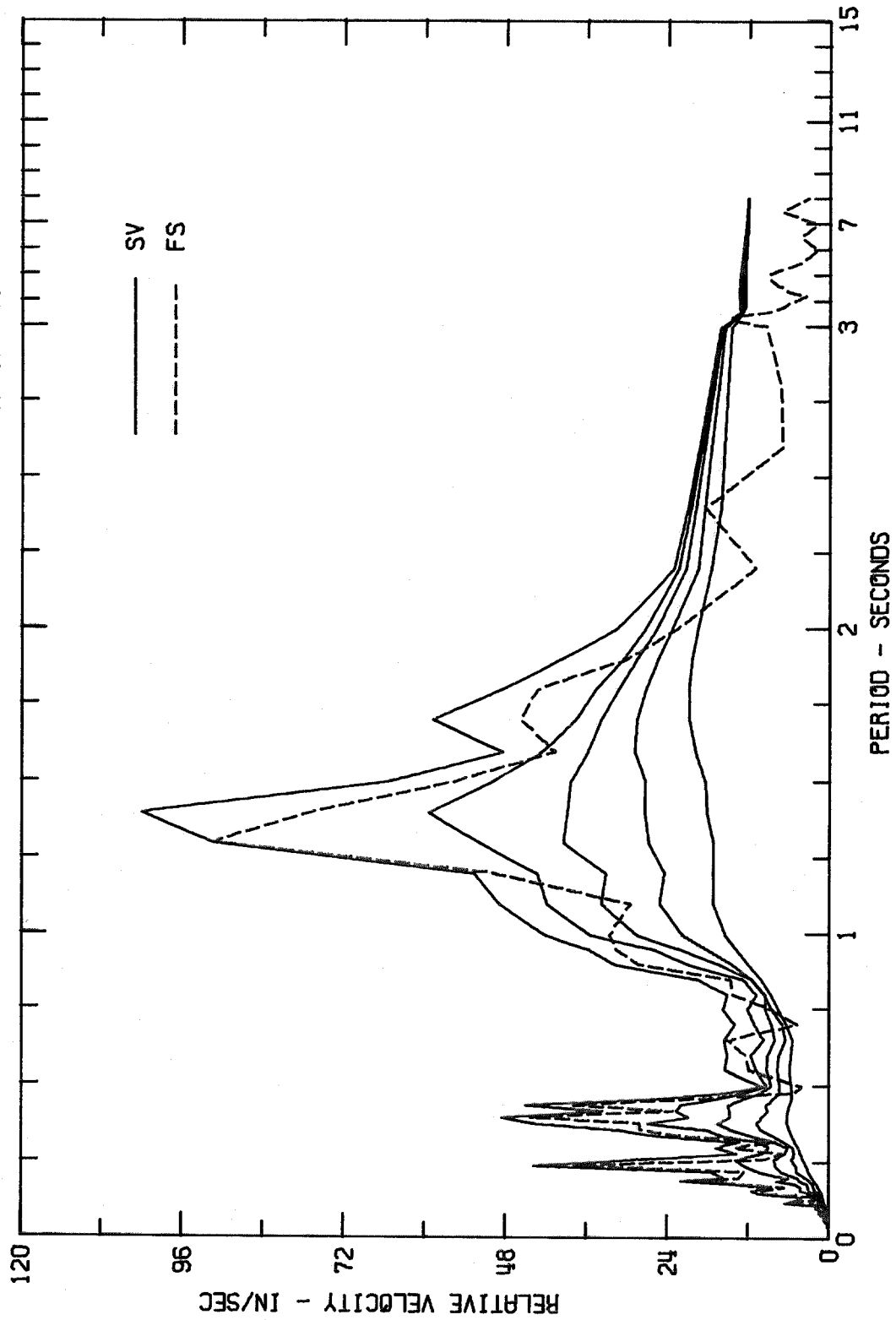
IIIG111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP S82E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	733-2	215-2	177-1	391-3	180-1	186-2	161-1	339-3	155-1	160-2	150-1	291-3	134-1	142-2	137-1	265-3	119-1
0.80	355-2	263-2	205-1	420-3	206-1	239-2	190-1	382-3	188-1	209-2	171-1	336-3	164-1	170-2	158-1	280-3	134-1
0.85	289-1	539-2	365-1	763-3	398-1	385-2	251-1	545-3	285-1	272-2	217-1	386-3	201-1	195-2	183-1	282-3	144-1
0.90	527-1	927-2	624-1	117-2	647-1	545-2	342-1	689-3	381-1	336-2	239-1	426-3	234-1	240-2	198-1	310-3	167-1
0.95	376-1	630-2	413-1	714-3	416-1	487-2	316-1	552-3	322-1	376-2	265-1	429-3	249-1	292-2	211-1	336-3	193-1
1.00	807-2	597-2	351-1	611-3	375-1	523-2	312-1	536-3	328-1	427-2	268-1	438-3	268-1	341-2	225-1	356-3	214-1
1.00	465-1	108-1	599-1	916-3	619-1	711-2	395-1	601-3	406-1	552-2	333-1	469-3	315-1	446-2	251-1	386-3	254-1
1.20	196-1	172-1	893-1	122-2	905-1	126-1	658-1	896-3	659-1	889-2	453-1	634-3	465-1	613-2	297-1	443-3	321-1
1.30	358 0	779-1	377 0	471-2	376 0	276-1	134 0	167-2	133 0	149-1	723-1	906-3	720-1	858-2	419-1	528-3	414-1
1.40	555-1	233-1	107 0	121-2	104 0	172-1	805-1	902-3	775-1	124-1	580-1	653-3	559-1	832-2	390-1	443-3	373-1
1.50	824-2	852-2	414-1	387-3	350-1	787-2	386-1	358-3	329-1	782-2	360-1	358-3	327-1	667-2	304-1	311-3	279-1
1.60	178-1	845-2	363-1	337-3	332-1	669-2	321-1	267-3	262-1	596-2	303-1	239-3	234-1	540-2	273-1	222-3	212-1
1.70	571-3	762-2	333-1	269-3	281-1	650-2	287-1	230-3	240-1	548-2	266-1	195-3	202-1	459-2	247-1	167-3	169-1
1.80	152-1	688-2	280-1	217-3	240-1	583-2	252-1	184-3	203-1	482-2	245-1	153-3	168-1	438-2	231-1	143-3	153-1
1.90	165-1	764-2	292-1	216-3	252-1	620-2	241-1	176-3	205-1	510-2	226-1	145-3	168-1	436-2	217-1	128-3	144-1
2.00	130-1	682-2	257-1	174-3	214-1	541-2	235-1	138-3	170-1	461-2	214-1	118-3	144-1	408-2	203-1	108-3	128-1
2.20	671-2	565-2	203-1	119-3	161-1	519-2	197-1	109-3	148-1	467-2	188-1	995-4	133-1	409-2	178-1	886-4	117-1
2.40	102-1	625-2	203-1	111-3	163-1	524-2	182-1	933-4	137-1	461-2	178-1	828-4	120-1	405-2	172-1	756-4	106-1
2.60	729-2	627-2	196-1	949-4	151-1	546-2	185-1	828-4	132-1	478-2	174-1	733-4	115-1	411-2	164-1	657-4	993-2
2.80	146-1	759-2	202-1	990-4	170-1	566-2	191-1	739-4	127-1	457-2	177-1	602-4	102-1	403-2	160-1	549-4	905-2
3.00	147-1	784-2	211-1	891-4	164-1	577-2	183-1	656-4	120-1	497-2	168-1	574-4	104-1	432-2	152-1	515-4	905-2
3.20	764-2	660-2	185-1	659-4	129-1	582-2	172-1	583-4	114-1	495-2	157-1	504-4	972-2	463-2	149-1	488-4	909-2
3.40	347-2	646-2	196-1	571-4	119-1	609-2	181-1	540-4	112-1	559-2	163-1	503-4	103-1	492-2	146-1	462-4	909-2
3.60	726-2	727-2	184-1	574-4	126-1	680-2	171-1	538-4	118-1	618-2	155-1	495-4	107-1	531-2	150-1	447-4	927-2
3.80	995-2	789-2	162-1	559-4	130-1	731-2	161-1	519-4	120-1	655-2	158-1	472-4	108-1	553-2	154-1	421-4	915-2
4.00	134-1	865-2	181-1	553-4	135-1	750-2	168-1	481-4	117-1	664-2	164-1	433-4	104-1	552-2	159-1	384-4	868-2
4.20	122-1	919-2	196-1	532-4	137-1	727-2	180-1	422-4	108-1	637-2	170-1	378-4	953-2	551-2	163-1	351-4	825-2
4.40	133-1	101-1	195-1	537-4	145-1	841-2	180-1	445-4	120-1	650-2	174-1	350-4	928-2	540-2	166-1	318-4	771-2
4.60	898-2	103-1	195-1	502-4	142-1	890-2	184-1	431-4	121-1	720-2	177-1	355-4	984-2	556-2	168-1	290-4	760-2
4.80	115-1	107-1	200-1	478-4	141-1	912-2	185-1	406-4	119-1	773-2	178-1	349-4	101-1	605-2	168-1	291-4	792-2
5.00	142-1	115-1	200-1	474-4	145-1	933-2	186-1	383-4	117-1	793-2	176-1	331-4	997-2	623-2	167-1	277-4	783-2
5.50	124-1	116-1	200-1	393-4	132-1	944-2	188-1	320-4	107-1	816-2	172-1	281-4	932-2	687-2	160-1	246-4	784-2
6.00	984-2	108-1	170-1	307-4	113-1	969-2	161-1	276-4	101-1	829-2	155-1	242-4	868-2	671-2	152-1	210-4	703-2
6.50	220-2	898-2	155-1	217-4	868-2	831-2	154-1	202-4	803-2	744-2	152-1	187-4	719-2	654-2	149-1	176-4	632-2
7.00	521-2	807-2	154-1	168-4	724-2	773-2	149-1	163-4	694-2	727-2	148-1	158-4	653-2	660-2	146-1	153-4	592-2
7.50	209-2	756-2	144-1	137-4	634-2	732-2	144-1	134-4	613-2	697-2	143-1	130-4	584-2	645-2	143-1	134-4	540-2
8.00	544-2	693-2	138-1	110-4	544-2	677-2	139-1	110-4	532-2	654-2	139-1	112-4	513-2	617-2	139-1	116-4	484-2

DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
1111G111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP 508W
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

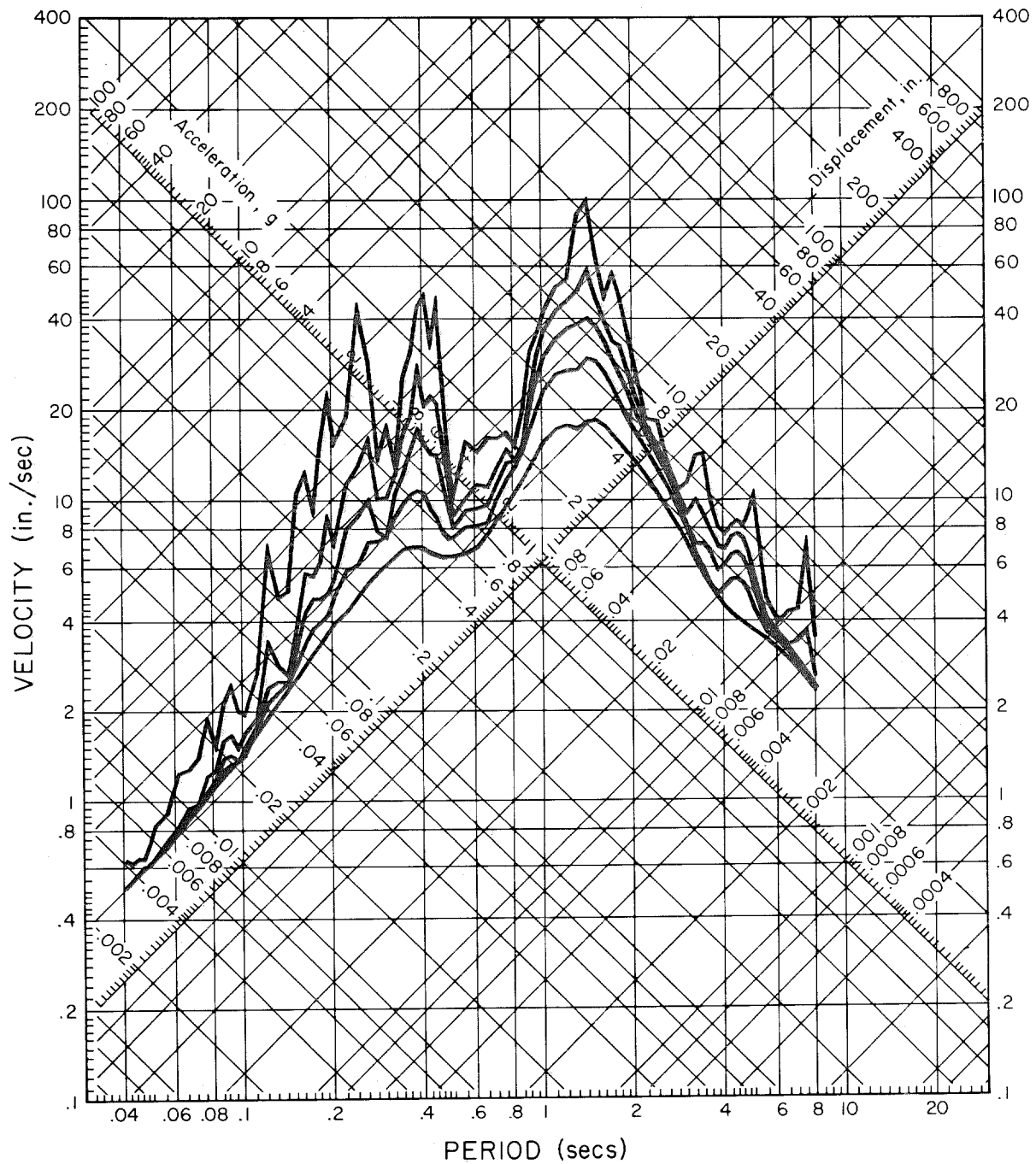


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP SOBH

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
 I11G111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP S08W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	104-3	404-5	196-3	258-3	636-3	328-5	845-4	210-3	516-3	330-5	862-4	211-3	519-3	330-5	845-4	211-3	519-3
0.042	146-3	413-5	158-3	239-3	619-3	366-5	980-4	212-3	548-3	365-5	949-4	211-3	546-3	364-5	931-4	211-3	545-3
0.044	503-4	453-5	163-3	239-3	647-3	403-5	993-4	212-3	575-3	401-5	102-3	211-3	573-3	400-5	102-3	211-3	571-3
0.046	559-4	470-5	138-3	227-3	643-3	443-5	118-3	214-3	606-3	438-5	116-3	212-3	598-3	436-5	113-3	211-3	596-3
0.048	132-3	551-5	219-3	244-3	722-3	466-5	125-3	207-3	610-3	472-5	129-3	209-3	617-3	474-5	125-3	210-3	620-3
0.050	177-3	659-5	280-3	269-3	828-3	519-5	153-3	212-3	652-3	512-5	145-3	209-3	644-3	513-5	137-3	210-3	644-3
0.055	235-3	807-5	380-3	272-3	921-3	647-5	178-3	219-3	740-3	618-5	174-3	209-3	706-3	620-5	166-3	209-3	709-3
0.060	286-3	119-4	663-3	338-3	124-2	792-5	207-3	225-3	830-3	766-5	206-3	217-3	802-3	757-5	200-3	215-3	793-3
0.065	185-3	133-4	724-3	322-3	128-2	986-5	287-3	238-3	953-3	938-5	261-3	227-3	907-3	920-5	238-3	222-3	889-3
0.070	989-4	157-4	658-3	329-3	141-2	109-4	349-3	229-3	986-3	109-4	318-3	228-3	985-3	108-4	271-3	227-3	978-3
0.075	832-3	226-4	111-2	410-3	189-2	145-4	566-3	265-3	122-2	129-4	382-3	235-3	108-2	127-4	295-3	231-3	106-2
0.080	581-3	195-4	792-3	311-3	153-2	162-4	524-3	259-3	127-2	152-4	378-3	243-3	119-2	149-4	319-3	239-3	117-2
0.085	795-3	290-4	142-2	411-3	215-2	216-4	654-3	307-3	159-2	189-4	440-3	269-3	140-2	173-4	365-3	246-3	128-2
0.090	129-2	354-4	155-2	447-3	247-2	239-4	722-3	303-3	167-2	205-4	460-3	260-3	143-2	191-4	406-3	243-3	134-2
0.095	121-2	307-4	142-2	348-3	203-2	228-4	751-3	258-3	151-2	208-4	547-3	236-3	137-2	206-4	439-3	234-3	136-2
0.100	174-2	314-4	181-2	321-3	197-2	269-4	767-3	274-3	169-2	240-4	628-3	247-3	151-2	228-4	511-3	234-3	143-2
0.110	133-2	475-4	201-2	402-3	271-2	337-4	119-2	285-3	192-2	318-4	944-3	269-3	181-2	309-4	738-3	262-3	176-2
0.120	629-2	134-3	671-2	953-3	702-2	656-4	283-2	465-3	343-2	462-4	166-2	329-2	292-3	487-4	123-2	298-3	235-2
0.130	210-2	100-3	409-2	610-3	487-2	593-4	238-2	360-3	286-2	527-4	174-2	320-3	254-2	411-4	106-2	292-3	215-2
0.140	114-2	114-3	484-2	595-3	512-2	594-4	222-2	310-3	266-2	562-4	174-2	294-3	252-2	561-4	137-2	295-3	252-2
0.150	100-1	257-3	107-1	116-2	107-2	125-1	289-2	422-3	387-2	780-4	215-2	356-3	326-2	693-4	162-2	315-3	290-2
0.160	997-2	319-3	116-1	127-2	125-1	150-3	431-2	598-3	589-2	111-3	291-2	443-3	437-2	874-4	203-2	353-3	343-2
0.170	655-2	254-3	854-2	901-3	941-2	155-3	429-2	552-3	576-2	130-3	316-2	465-3	482-2	103-3	229-2	374-3	383-2
0.180	131-1	452-3	139-1	142-2	157-1	184-3	502-2	581-3	644-2	138-3	332-2	437-3	483-2	115-3	250-2	370-3	403-2
0.190	185-1	681-3	221-1	193-2	225-1	268-3	787-2	759-3	887-2	153-3	434-2	436-3	506-2	128-3	285-2	369-3	425-2
0.200	133-1	502-3	157-1	128-2	157-1	232-3	611-2	599-3	730-2	180-3	467-2	465-3	565-2	156-3	340-2	394-3	491-2
0.220	125-1	676-3	175-1	143-2	193-1	403-3	105-1	860-3	115-1	285-3	715-2	597-3	816-2	210-3	481-2	447-3	600-2
0.240	380-1	169-2	439-1	300-2	443-1	505-3	125-1	898-3	132-1	343-3	798-2	608-3	900-2	241-3	503-2	438-3	632-2
0.260	977-2	121-2	276-1	184-2	294-1	670-3	139-1	101-2	162-1	422-3	822-2	649-3	102-1	304-3	559-2	476-3	736-2
0.280	689-2	625-3	136-1	816-3	140-1	457-3	992-2	597-3	102-1	354-3	661-2	463-3	794-2	330-3	523-2	439-3	742-2
0.300	140-1	852-3	168-1	968-3	178-1	494-3	904-2	566-3	103-1	363-3	618-2	417-3	762-2	367-3	545-2	428-3	768-2
0.320	795-2	674-3	132-1	673-3	132-1	631-3	100-1	634-3	124-1	550-3	813-2	548-3	108-1	456-3	674-2	456-3	896-2
0.340	227-1	142-2	258-1	125-2	262-1	911-3	161-1	805-3	168-1	670-3	117-1	597-3	123-1	534-3	851-2	480-3	987-2
0.360	281-1	181-2	315-1	143-2	317-1	111-2	181-1	879-3	194-1	863-3	146-1	680-3	150-1	605-3	101-1	486-3	105-1
0.380	283-1	272-2	444-1	192-2	450-1	168-2	270-1	118-2	278-1	106-2	166-1	750-3	175-1	660-3	107-1	477-3	109-1
0.400	444-1	312-2	486-1	199-2	490-1	134-2	208-1	862-3	211-1	996-3	147-1	640-3	156-1	680-3	101-1	438-3	106-1
0.420	232-1	227-2	334-1	132-2	340-1	151-2	227-1	882-3	227-1	966-3	148-1	680-3	156-1	680-3	101-1	438-3	106-1
0.440	379-1	320-2	452-1	169-2	458-1	148-2	221-1	787-3	124-1	100-2	150-1	527-3	143-1	632-3	916-2	371-3	946-2
0.460	191-1	182-2	251-1	882-3	249-1	115-2	165-1	560-3	158-1	859-3	124-1	420-3	117-1	578-3	832-2	288-3	886-2
0.480	516-2	111-2	193-1	494-3	145-1	927-3	125-1	411-3	121-1	745-3	101-1	333-3	975-2	577-3	752-2	259-3	756-2
0.500	409-2	831-3	995-2	340-3	104-1	719-3	932-2	295-3	903-2	657-3	853-2	269-3	939-2	607-3	733-2	253-3	763-2
0.550	118-1	139-2	155-1	471-3	159-1	904-3	108-1	306-3	103-1	822-3	930-2	279-3	939-2	723-3	778-2	247-3	826-2
0.600	124-1	140-2	151-1	399-3	147-1	109-2	116-1	311-3	114-1	910-3	912-2	259-3	953-2	797-3	744-2	230-3	834-2
0.650	152-1	169-2	156-1	410-3	164-1	116-2	978-2	282-3	112-1	101-2	809-2	245-3	981-2	884-3	653-2	216-3	855-2
0.700	475-2	182-2	140-1	380-3	163-1	146-2	111-1	306-3	131-1	129-2	853-2	272-3	116-1	115-2	703-2	244-3	103-1

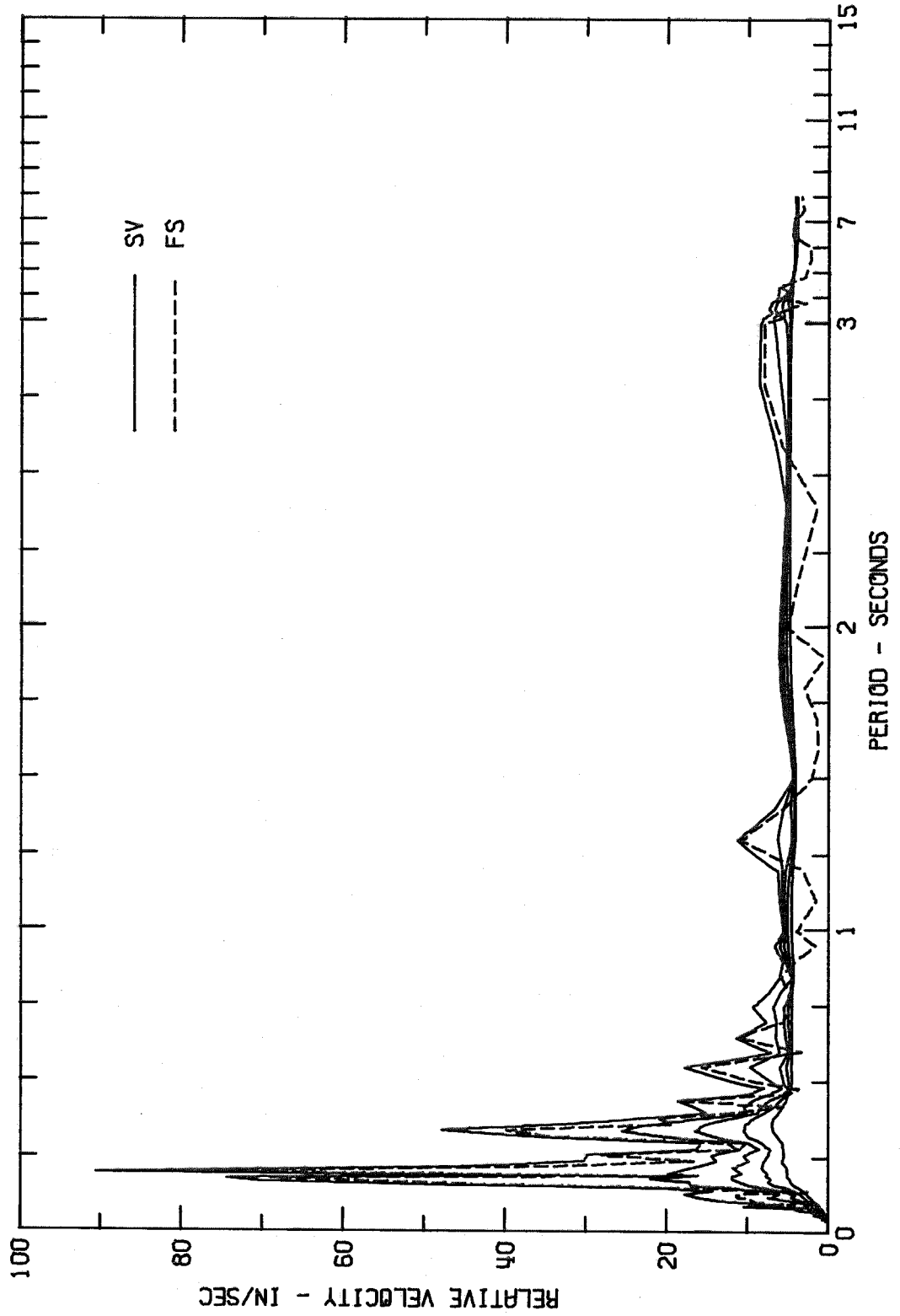
DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

IIIG111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP S08W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	855-2	204-2	157-1	371-3	170-1	179-2	121-1	325-3	149-1	160-2	953-2	292-3	134-1	141-2	858-2	261-3	118-1	116-2	758-2	225-3	975-2
0.80	143-1	196-2	152-1	313-3	153-1	175-2	108-1	281-3	138-1	175-2	959-2	281-3	137-1	165-2	969-2	269-3	130-1	136-2	873-2	233-3	107-1
0.85	147-1	274-2	194-1	389-3	203-1	202-2	128-1	286-3	149-1	210-2	114-1	298-3	155-1	199-2	115-1	287-3	147-1	160-2	101-1	240-3	118-1
0.90	284-1	457-2	319-1	577-3	319-1	321-2	209-1	406-3	224-1	291-2	163-1	369-3	203-1	250-2	145-1	320-3	174-1	188-2	120-1	248-3	131-1
0.95	317-1	553-2	359-1	627-3	366-1	465-2	260-1	528-3	308-1	391-2	221-1	445-3	259-1	311-2	182-1	357-3	206-1	220-2	138-1	259-3	145-1
1.00	326-1	685-2	422-1	701-3	430-1	591-2	355-1	604-3	371-1	486-2	285-1	499-3	305-1	373-2	218-1	388-3	234-1	252-2	154-1	271-3	158-1
1.10	296-1	912-2	491-1	771-3	521-1	758-2	420-1	642-3	433-1	614-2	338-1	521-3	351-1	468-2	253-1	402-3	267-1	306-2	173-1	270-3	174-1
1.20	499-1	106-1	528-1	753-3	555-1	897-2	434-1	638-3	470-1	722-2	331-1	515-3	378-1	524-2	245-1	380-3	274-1	346-2	173-1	261-3	181-1
1.30	916-1	189-1	916-1	114-2	917-1	104-1	519-1	635-3	506-1	812-2	395-1	493-3	392-1	572-2	269-1	352-3	276-1	364-2	173-1	240-3	175-1
1.40	766-1	228-1	102 0	119-2	102 0	132-1	595-1	693-3	596-1	915-2	389-1	479-3	410-1	671-2	275-1	358-3	301-1	414-2	183-1	236-3	186-1
1.50	558-1	156-1	655-1	709-3	653-1	113-1	501-1	515-3	474-1	920-2	384-1	421-3	385-1	703-2	273-1	326-3	294-1	449-2	185-1	222-3	188-1
1.60	407-1	122-1	484-1	491-3	482-1	101-1	427-1	406-3	398-1	870-2	359-1	349-3	342-1	689-2	290-1	283-3	270-1	459-2	199-1	201-3	180-1
1.70	458-1	156-1	590-1	554-3	579-1	928-2	376-1	328-3	343-1	808-2	339-1	287-3	298-1	653-2	286-1	237-3	241-1	452-2	209-1	179-3	167-1
1.80	434-1	136-1	485-1	432-3	477-1	948-2	347-1	299-3	331-1	754-2	313-1	239-3	263-1	612-2	273-1	197-3	213-1	451-2	209-1	160-3	157-1
1.90	300-1	111-1	396-1	317-3	370-1	834-2	307-1	236-3	275-1	710-2	286-1	202-3	234-1	578-2	255-1	166-3	191-1	445-2	204-1	143-3	147-1
2.00	226-1	936-2	315-1	239-3	294-1	747-2	273-1	191-3	234-1	659-2	257-1	169-3	207-1	556-2	234-1	146-3	174-1	441-2	195-1	127-3	138-1
2.20	110-1	663-2	231-1	140-3	189-1	631-2	223-1	133-3	180-1	585-2	212-1	124-3	167-1	522-2	195-1	114-3	149-1	426-2	175-1	100-3	121-1
2.40	184-1	708-2	210-1	125-3	185-1	583-2	206-1	103-3	152-1	545-2	198-1	777-4	142-1	490-2	185-1	890-4	128-1	406-2	161-1	818-4	106-1
2.60	709-2	553-2	194-1	837-4	133-1	532-2	190-1	807-4	128-1	502-2	185-1	771-4	121-1	458-2	175-1	715-4	110-1	386-2	157-1	678-4	933-2
2.80	734-2	489-2	178-1	638-4	109-1	474-2	176-1	621-4	106-1	453-2	172-1	602-4	101-1	422-2	165-1	576-4	947-2	367-2	151-1	573-4	825-2
3.00	945-2	556-2	163-1	631-4	116-1	437-2	161-1	498-4	917-2	400-2	159-1	466-4	839-2	384-2	155-1	463-4	804-2	348-2	145-1	503-4	729-2
3.20	136-1	728-2	148-1	728-4	143-1	519-2	147-1	519-4	102-1	370-2	147-1	378-4	727-2	350-2	146-1	391-4	689-2	329-2	140-1	443-4	647-2
3.40	141-1	782-2	145-1	692-4	144-1	488-2	136-1	432-4	902-2	392-2	137-1	349-4	725-2	329-2	137-1	331-4	609-2	314-2	135-1	391-4	580-2
3.60	871-2	575-2	133-1	454-4	100-1	454-2	132-1	359-4	792-2	388-2	130-1	309-4	678-2	307-2	131-1	281-4	537-2	301-2	130-1	347-4	526-2
3.80	683-2	497-2	134-1	352-4	822-2	431-2	133-1	305-4	712-2	363-2	131-1	258-4	600-2	304-2	129-1	239-4	503-2	293-2	127-1	310-4	485-2
4.00	539-2	495-2	135-1	316-4	777-2	447-2	134-1	286-4	702-2	400-2	132-1	258-4	629-2	338-2	129-1	229-4	531-2	289-2	125-1	278-4	455-2
4.20	358-2	556-2	135-1	322-4	831-2	509-2	134-1	295-4	762-2	450-2	132-1	263-4	673-2	373-2	130-1	228-4	559-2	288-2	125-1	259-4	431-2
4.40	639-2	604-2	135-1	319-4	862-2	548-2	134-1	290-4	783-2	479-2	132-1	257-4	685-2	394-2	130-1	219-4	563-2	289-2	125-1	241-4	414-2
4.60	757-2	609-2	135-1	294-4	832-2	552-2	134-1	268-4	755-2	483-2	132-1	238-4	660-2	397-2	130-1	205-4	543-2	293-2	125-1	226-4	401-2
4.80	879-2	701-2	134-1	311-4	918-2	522-2	133-1	232-4	683-2	460-2	132-1	175-4	524-2	357-2	129-1	162-4	448-2	299-2	125-1	198-4	376-2
5.00	915-2	840-2	133-1	343-4	105-1	464-2	132-1	190-4	584-2	417-2	131-1	175-4	524-2	357-2	129-1	162-4	448-2	299-2	125-1	198-4	376-2
5.50	400-2	425-2	131-1	143-4	485-2	363-2	130-1	124-4	415-2	342-2	129-1	121-4	390-2	326-2	127-1	127-4	372-2	307-2	125-1	171-4	350-2
6.00	193-2	382-2	128-1	108-4	400-2	354-2	128-1	102-4	371-2	345-2	127-1	104-4	361-2	331-2	126-1	111-4	346-2	311-2	124-1	150-4	325-2
6.50	432-2	449-2	126-1	108-4	434-2	348-2	126-1	858-5	337-2	341-2	125-1	893-5	329-2	329-2	124-1	966-5	318-2	311-2	123-1	134-4	300-2
7.00	205-2	492-2	124-1	102-4	442-2	384-2	124-1	803-5	345-2	332-2	124-1	759-5	298-2	323-2	123-1	839-5	290-2	308-2	122-1	121-4	277-2
7.50	713-2	855-2	122-1	155-4	716-2	447-2	122-1	815-5	375-2	320-2	122-1	648-5	268-2	315-2	122-1	731-5	264-2	305-2	121-1	110-4	255-2
8.00	324-2	453-2	121-1	724-5	356-2	336-2	121-1	537-5	263-2	309-2	121-1	557-5	243-2	307-2	121-1	642-5	241-2	300-2	120-1	102-4	235-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

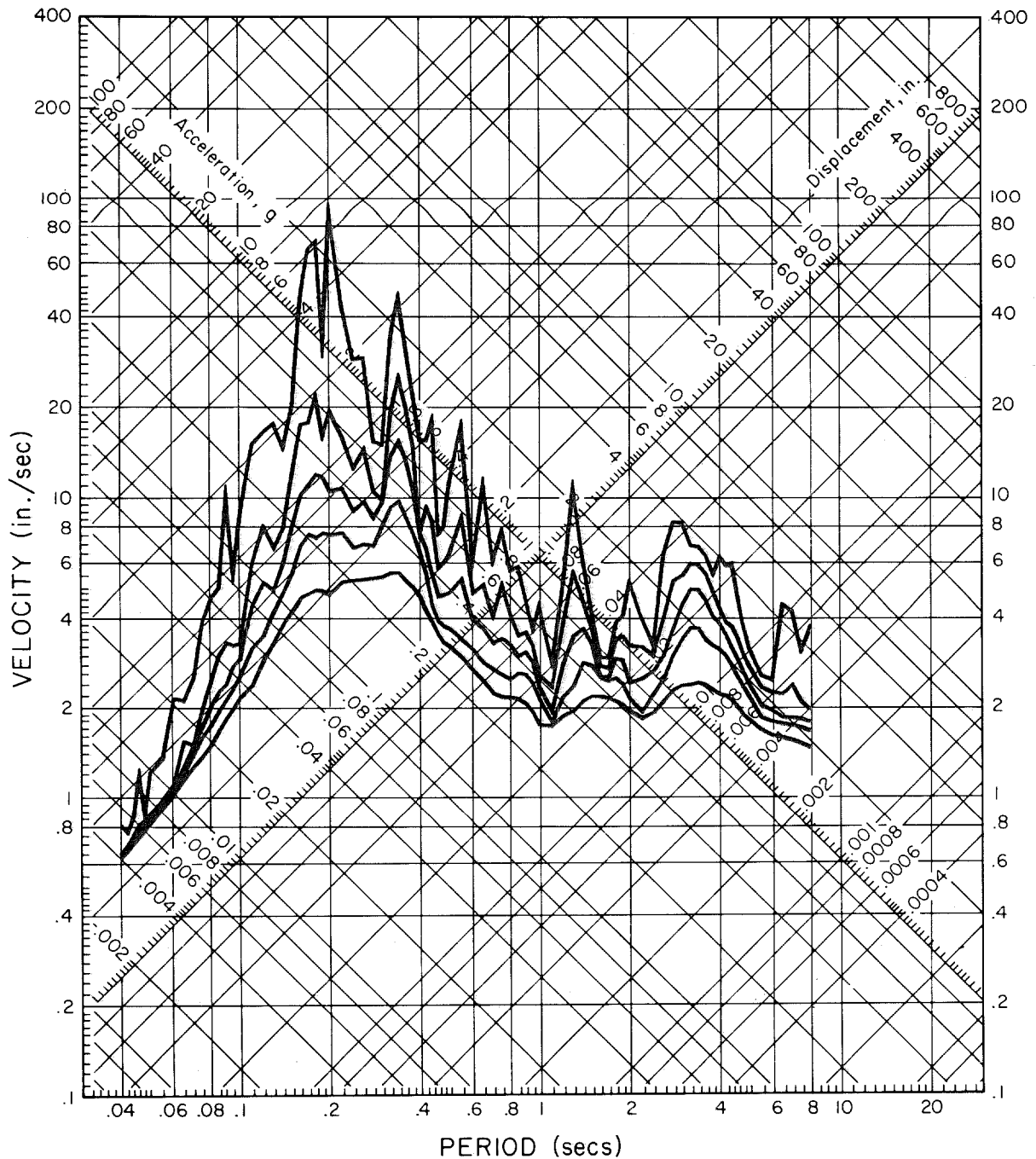


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG111 71.031.0 JET PROPULSION LAB., 9TH FLOOR, PASADENA, CAL. COMP DOWN

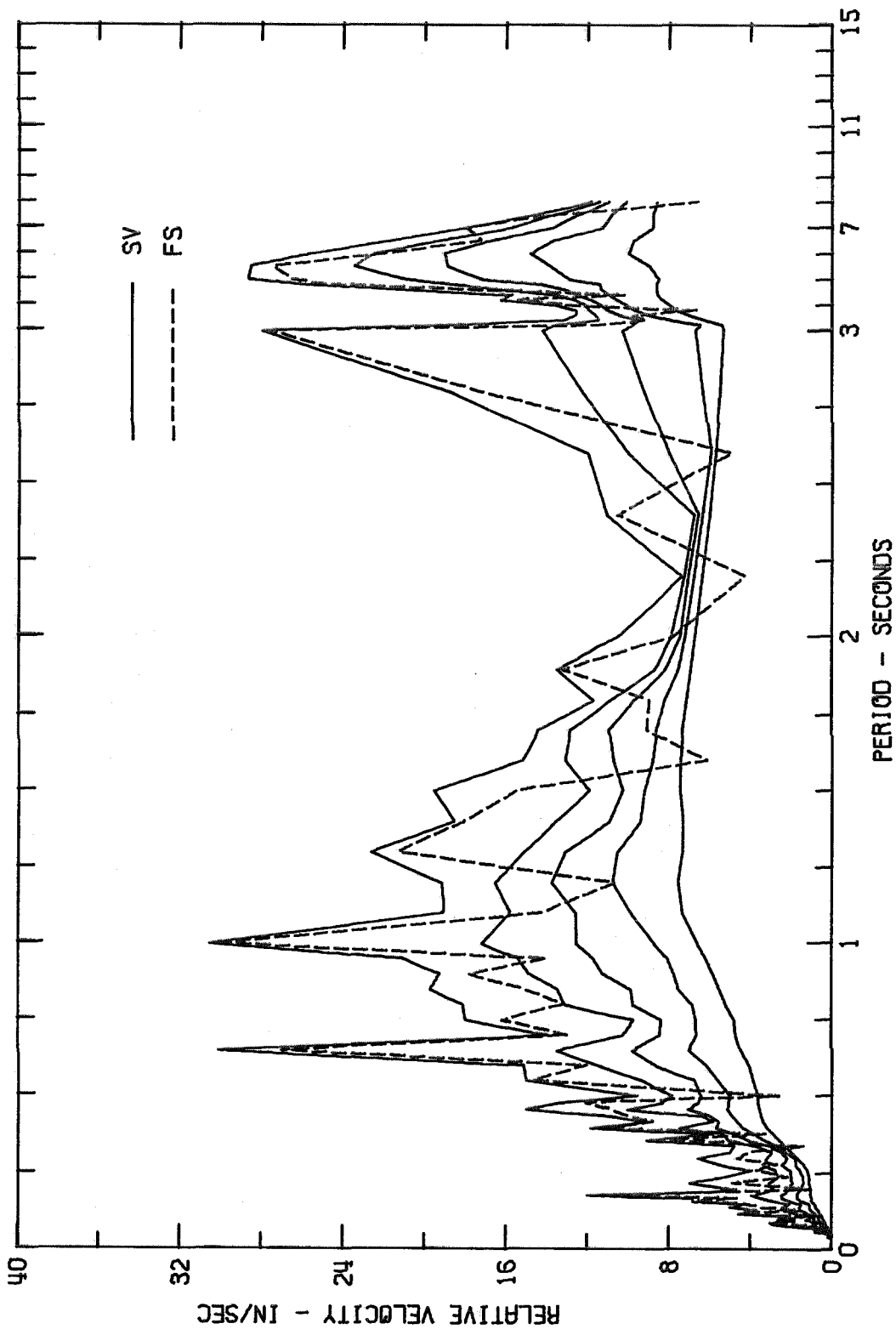
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	475-2	959-3	937-2	174-3	803-2	630-3	686-2	114-3	528-2	420-3	553-2	765-4	351-2	316-3	506-2	595-4	265-2	265-3	459-2	636-4	222-2
0.80	499-2	746-3	734-2	119-3	586-2	537-3	593-2	865-4	422-2	424-3	468-2	686-4	333-2	325-3	471-2	558-4	255-2	282-3	450-2	598-4	221-2
0.85	584-2	816-3	604-2	115-3	603-2	486-3	458-2	686-4	359-2	413-3	458-2	592-4	305-2	363-3	449-2	547-4	268-2	296-3	439-2	562-4	219-2
0.90	427-2	674-3	568-2	851-4	470-2	528-3	532-2	671-4	368-2	453-3	510-2	582-4	316-2	380-3	481-2	516-4	265-2	302-3	445-2	520-4	210-2
0.95	163-2	570-3	661-2	645-4	377-2	501-3	602-2	570-4	331-2	439-3	551-2	504-4	290-2	373-3	504-2	457-4	246-2	297-3	456-2	473-4	196-2
1.00	398-2	722-3	563-2	739-4	454-2	419-3	560-2	430-4	263-2	381-3	544-2	398-4	239-2	349-3	512-2	387-4	219-2	284-3	463-2	424-4	178-2
1.10	158-2	506-3	615-2	428-4	289-2	421-3	587-2	358-4	240-2	348-3	555-2	299-4	199-2	318-3	515-2	312-4	182-2	310-3	463-2	384-4	177-2
1.20	320-2	103-2	636-2	734-4	541-2	119-3	636-2	723-4	576-2	741-3	455-2	454-4	290-2	426-3	487-2	345-4	223-2	360-3	446-2	381-4	192-2
1.30	108-1	230-2	113-1	139-3	111-1	103-2	562-2	542-4	466-2	846-3	479-2	445-4	379-2	501-3	428-2	350-4	292-2	481-3	417-2	355-4	216-2
1.40	567-2	139-2	676-2	729-4	627-2	103-2	898-3	449-2	376-2	794-3	447-2	366-4	332-2	679-3	437-2	325-4	284-2	535-3	418-2	334-4	224-2
1.50	217-2	100-2	447-2	456-4	421-2	898-3	485-2	289-4	284-2	664-3	479-2	278-4	261-2	660-3	464-2	280-4	259-2	570-3	435-2	311-4	224-2
1.60	127-2	771-3	487-2	308-4	302-2	723-3	485-2	269-4	278-2	704-3	521-2	254-4	260-2	685-3	494-2	259-4	253-2	597-3	454-2	286-4	220-2
1.70	157-2	817-3	557-2	289-4	302-2	752-3	541-2	314-4	347-2	860-3	555-2	275-4	300-2	738-3	519-2	249-4	257-2	617-3	470-2	261-4	215-2
1.80	311-2	113-2	608-2	359-4	397-2	994-3	584-2	306-4	357-2	896-3	572-2	255-4	286-2	745-3	534-2	228-4	246-2	631-3	482-2	236-4	208-2
1.90	650-3	127-2	625-2	362-4	422-2	108-2	601-2	270-4	331-2	790-3	572-2	204-4	248-2	697-3	539-2	192-4	218-2	636-3	490-2	212-4	199-2
2.00	511-2	170-2	614-2	436-4	536-2	105-2	596-2	270-4	307-2	898-3	552-2	192-4	256-2	694-3	532-2	162-4	198-2	661-3	495-2	184-4	188-2
2.20	347-2	142-2	570-2	301-4	408-2	115-2	563-2	244-4	329-2	258-2	531-2	187-4	273-2	872-3	519-2	162-4	228-2	754-3	492-2	176-4	197-2
2.40	152-2	127-2	539-2	226-4	333-2	171-2															

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP N52W
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

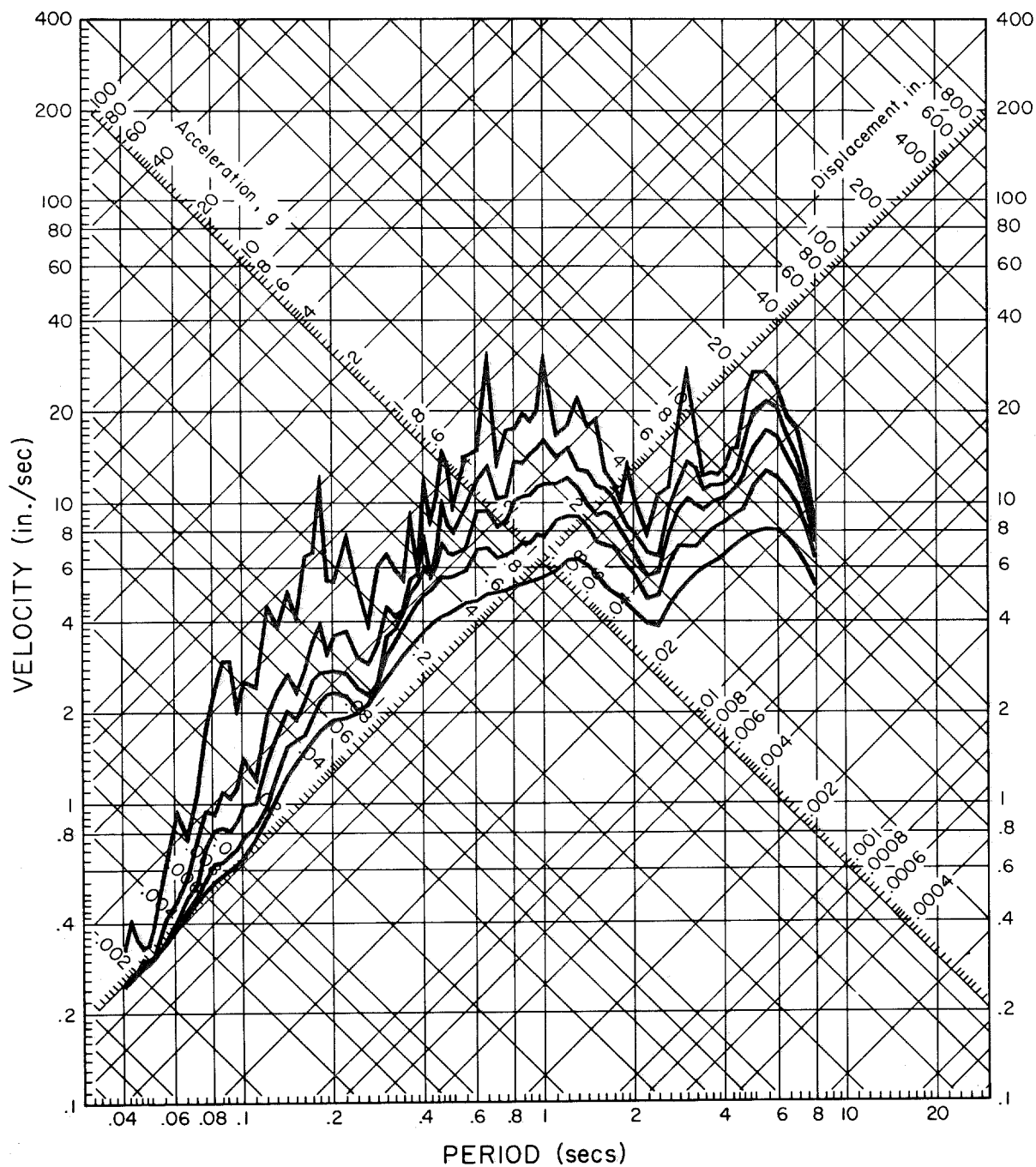


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP N52W

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG112 71.038-0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP N52W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

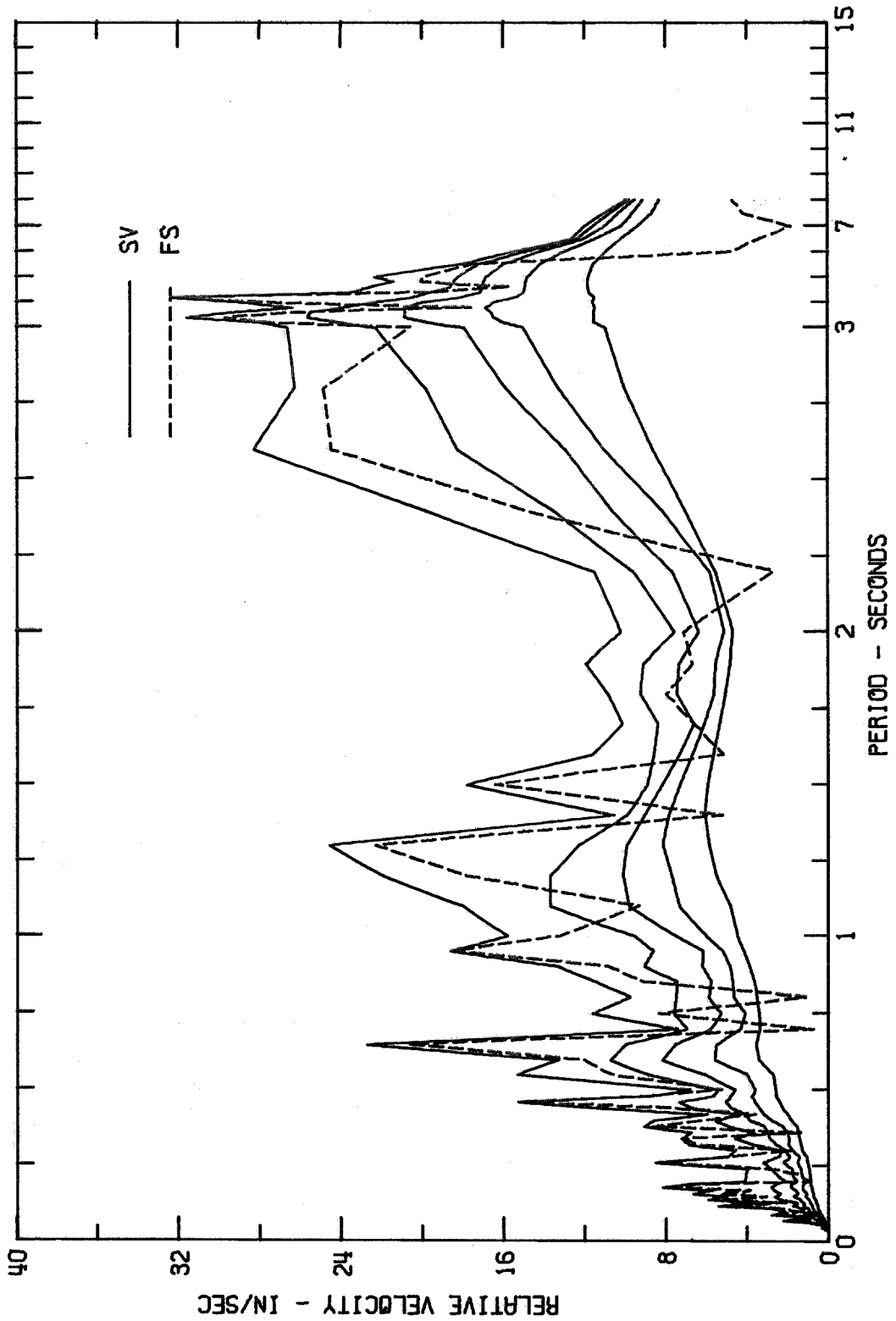
DAMPING = 0 PER CENT					DAMPING = 2 PER CENT					DAMPING = 5 PER CENT					DAMPING = 10 PER CENT					DAMPING = 20 PER CENT						
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	
0.040	138-3	215-5	170-3	137-3	338-3	165-5	772-4	105-3	260-3	162-5	668-4	104-3	255-3	163-5	634-4	104-3	256-3	162-5	612-4	104-3	255-3					
0.042	145-3	279-5	184-3	162-3	418-3	185-5	814-4	107-3	278-3	182-5	690-4	105-3	272-3	180-5	692-4	104-3	269-3	179-5	675-4	104-3	268-3					
0.044	152-3	256-5	176-3	135-3	366-3	200-5	860-4	105-3	286-3	200-5	757-4	105-3	285-3	197-5	755-4	104-3	282-3	196-5	743-4	104-3	280-3					
0.046	232-4	249-5	132-3	120-3	341-3	229-5	978-4	110-3	313-3	218-5	859-4	105-3	298-3	215-5	834-4	104-3	293-3	214-5	817-4	103-3	292-3					
0.048	494-4	267-5	229-3	118-3	349-3	236-5	114-3	104-3	308-3	233-5	946-4	103-3	305-3	231-5	927-4	102-3	303-3	233-5	897-4	103-3	305-3					
0.050	216-4	319-5	188-3	130-3	401-3	251-5	135-3	103-3	316-3	251-5	114-3	103-3	316-3	251-5	103-3	103-3	316-3	253-5	982-4	103-3	318-3					
0.055	256-3	565-5	386-3	191-3	646-3	375-5	257-3	126-3	428-3	315-5	179-3	106-3	360-3	314-5	134-3	106-3	359-3	312-5	120-3	106-3	357-3					
0.060	632-3	922-5	848-3	262-3	966-3	649-5	317-3	133-3	491-3	408-5	215-3	116-3	427-3	391-5	170-3	111-3	409-3	381-5	140-3	108-3	398-3					
0.065	427-3	824-5	604-3	199-3	796-3	610-5	405-3	147-3	590-3	520-5	286-3	126-3	503-3	471-5	214-3	114-3	456-3	457-5	167-3	111-3	441-3					
0.070	613-3	124-4	929-3	260-3	111-2	873-5	552-3	183-3	784-3	621-5	350-3	129-3	557-3	569-5	250-3	118-3	510-3	540-5	193-3	113-3	485-3					
0.075	135-2	220-4	177-2	401-3	184-2	117-4	684-3	211-3	980-3	887-5	449-3	161-3	743-3	691-5	313-3	128-3	579-3	629-5	233-3	115-3	527-3					
0.080	933-3	312-4	217-2	498-3	245-2	121-4	735-3	195-3	955-3	107-4	532-3	173-3	841-3	827-5	369-3	135-3	650-3	719-5	272-3	115-3	564-3					
0.085	220-2	415-4	288-2	587-3	306-2	152-4	920-3	217-3	112-2	116-4	584-3	164-3	861-3	890-5	421-3	129-3	658-3	804-5	314-3	114-3	594-3					
0.090	298-2	438-4	304-2	553-3	306-2	155-4	792-3	195-3	108-2	119-4	524-3	151-3	836-3	996-5	472-3	127-3	695-3	886-5	356-3	113-3	618-3					
0.095	181-2	321-4	203-2	364-3	212-2	177-4	976-3	201-3	117-2	136-4	770-3	156-3	904-3	110-4	563-3	128-3	731-3	977-5	385-3	111-3	646-3					
0.100	263-2	416-4	265-2	426-3	261-2	231-4	128-2	235-3	145-2	162-4	892-3	164-3	102-2	126-4	630-3	130-3	796-3	108-4	417-3	112-3	682-3					
0.110	131-2	442-4	221-2	373-3	252-2	216-4	998-3	183-3	123-2	182-4	850-3	154-3	104-2	153-4	690-3	130-3	875-3	139-4	493-3	118-3	794-3					
0.120	459-2	886-4	463-2	629-3	464-2	387-4	171-2	276-3	202-2	272-4	108-2	194-3	142-2	195-4	810-3	138-3	102-2	178-4	587-3	128-3	936-3					
0.130	160-2	826-4	368-2	500-3	399-2	509-4	220-2	306-3	246-2	364-4	154-2	219-3	175-2	267-4	101-2	163-3	129-2	227-4	675-3	140-3	110-2					
0.140	344-2	115-3	500-2	602-3	518-2	617-4	244-2	321-3	277-2	468-4	163-2	244-3	210-2	355-4	109-2	187-3	159-2	284-4	762-3	152-3	127-2					
0.150	422-2	101-3	425-2	463-3	426-2	577-4	210-2	262-3	241-2	468-4	155-2	212-3	196-2	400-4	112-2	185-3	167-2	336-4	872-3	157-3	141-2					
0.160	661-2	175-3	687-2	702-3	690-2	736-4	272-2	294-3	289-2	577-4	203-2	232-3	226-2	445-4	150-2	179-3	174-2	393-4	995-3	162-3	154-2					
0.170	467-2	191-3	688-2	679-3	709-2	970-4	348-2	341-3	358-2	718-4	246-2	256-3	265-2	539-4	170-2	195-3	199-2	451-4	103-2	165-3	166-2					
0.180	111-1	344-3	120-1	108-2	120-1	116-3	397-2	369-3	406-2	805-4	259-2	256-3	281-2	646-4	173-2	206-3	225-2	515-4	105-2	169-3	179-2					
0.190	534-2	172-3	561-2	487-3	569-2	986-4	308-2	280-3	326-2	857-4	229-2	242-3	283-2	719-4	165-2	207-3	237-2	569-4	106-2	167-3	188-2					
0.200	101-2	179-3	470-2	459-3	564-2	118-3	288-2	305-3	372-2	906-4	216-2	234-3	284-2	767-4	154-2	198-3	241-2	622-4	107-2	162-3	195-2					
0.220	489-2	280-3	701-2	591-3	799-2	135-3	308-2	286-3	385-2	976-4	197-2	205-3	278-2	822-4	142-2	177-3	234-2	696-4	114-2	156-3	198-2					
0.240	213-2	208-3	521-2	369-3	545-2	120-3	267-2	215-3	314-2	952-4	202-2	172-3	249-2	804-4	142-2	143-3	210-2	788-4	114-2	148-3	206-2					
0.260	373-2	167-3	393-2	253-3	404-2	124-3	277-2	189-3	300-2	979-4	204-2	149-3	236-2	907-4	156-2	139-3	219-2	916-4	120-2	146-3	221-2					
0.280	271-2	285-3	558-2	371-3	639-2	157-3	340-2	206-3	352-2	115-3	246-2	150-3	258-2	116-3	177-2	156-3	262-2	109-3	139-2	149-3	245-2					
0.300	465-2	334-3	656-2	379-3	700-2	221-3	320-2	250-3	463-2	177-3	220-2	201-3	370-2	152-3	180-2	174-3	320-2	129-3	168-2	154-3	270-2					
0.320	410-2	314-3	499-2	314-3	618-2	219-3	297-2	220-3	431-2	199-3	247-2	200-3	390-2	181-3	225-2	184-3	356-2	150-3	199-2	158-3	294-2					
0.340	128-2	309-3	482-2	273-3	571-2	246-3	373-2	217-3	454-2	238-3	305-2	213-3	440-2	215-3	332-2	201-3	439-2	196-3	259-2	163-3	342-2					
0.360	798-2	531-3	913-2	419-3	927-2	329-3	509-2	260-3	574-2	295-3	414-2	234-3	515-2	252-3	332-2	201-3	439-2	196-3	259-2	163-3	342-2					
0.380	327-2	377-3	582-2	267-3	623-2	363-3	535-2	258-3	601-2	337-3	481-2	238-3	558-2	288-3	386-2	206-3	508-2	246-3	316-2	163-3	386-2					
0.400	112-1	776-3	119-1	496-3	121-1	497-3	753-2	317-3	782-2	394-3	571-2	228-3	620-2	323-3	437-2	209-3	508-2	270-3	336-2	163-3	404-2					
0.420	876-2	604-3	998-2	350-3	903-2	396-3	580-2	230-3	593-2	448-3	603-2	236-3	640-2	390-3	490-2	207-3	557-2	294-3	348-2	163-3	420-2					
0.440	100-1	769-3	109-1	406-3	109-1	501-3	637-2	264-3	716-2	448-3	603-2	236-3	640-2	390-3	490-2	207-3	557-2	294-3	348-2	163-3	420-2					
0.460	109-1	112-2	150-1	541-3	153-1	754-3	101-1	363-3	103-1	552-3	708-2	267-3	754-2	427-3	513-2	210-3	584-2	316-3	358-2	160-3	432-2					
0.480	121-1	104-2	133-1	464-3	136-1	670-3	830-2	298-3	877-2	540-3	658-2	239-3	707-2	445-3	509-2	202-3	583-2	335-3	366-2	158-3	438-2					
0.500	259-2	805-3	952-2	329-3	101-1	657-3	791-2	270-3	826-2	556-3	646-2	227-3	699-2	467-3	503-2	194-3	587-2	358-2	367-2	154-3	450-2					
0.550	147-1	130-2	150-1	441-3	149-1	886-3	933-2	300-3	101-1	639-3	676-2	215-3	730-2	539-3	561-2</											

RELATIVE VELOCITY RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

111G112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP N38E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

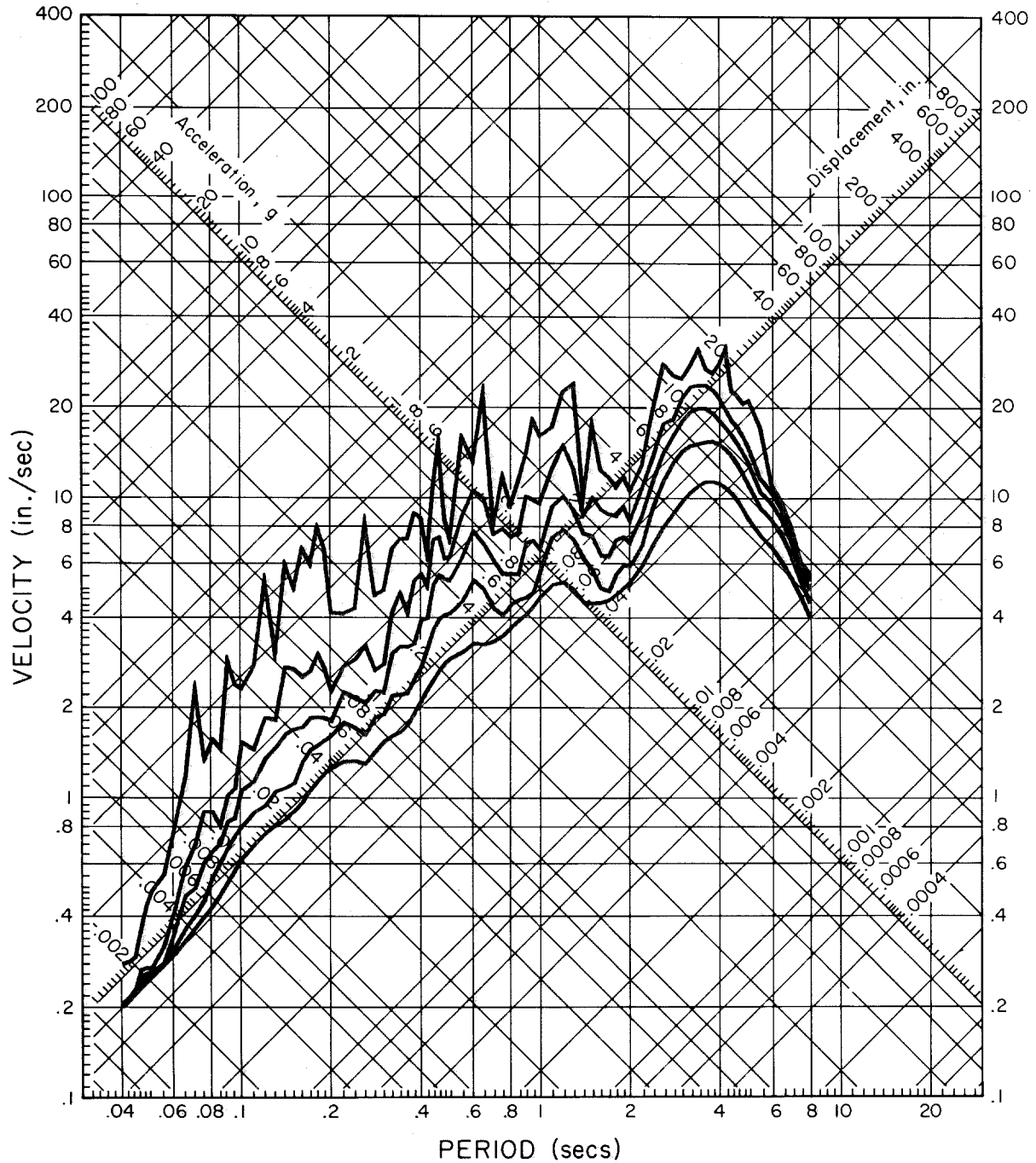


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP N38E

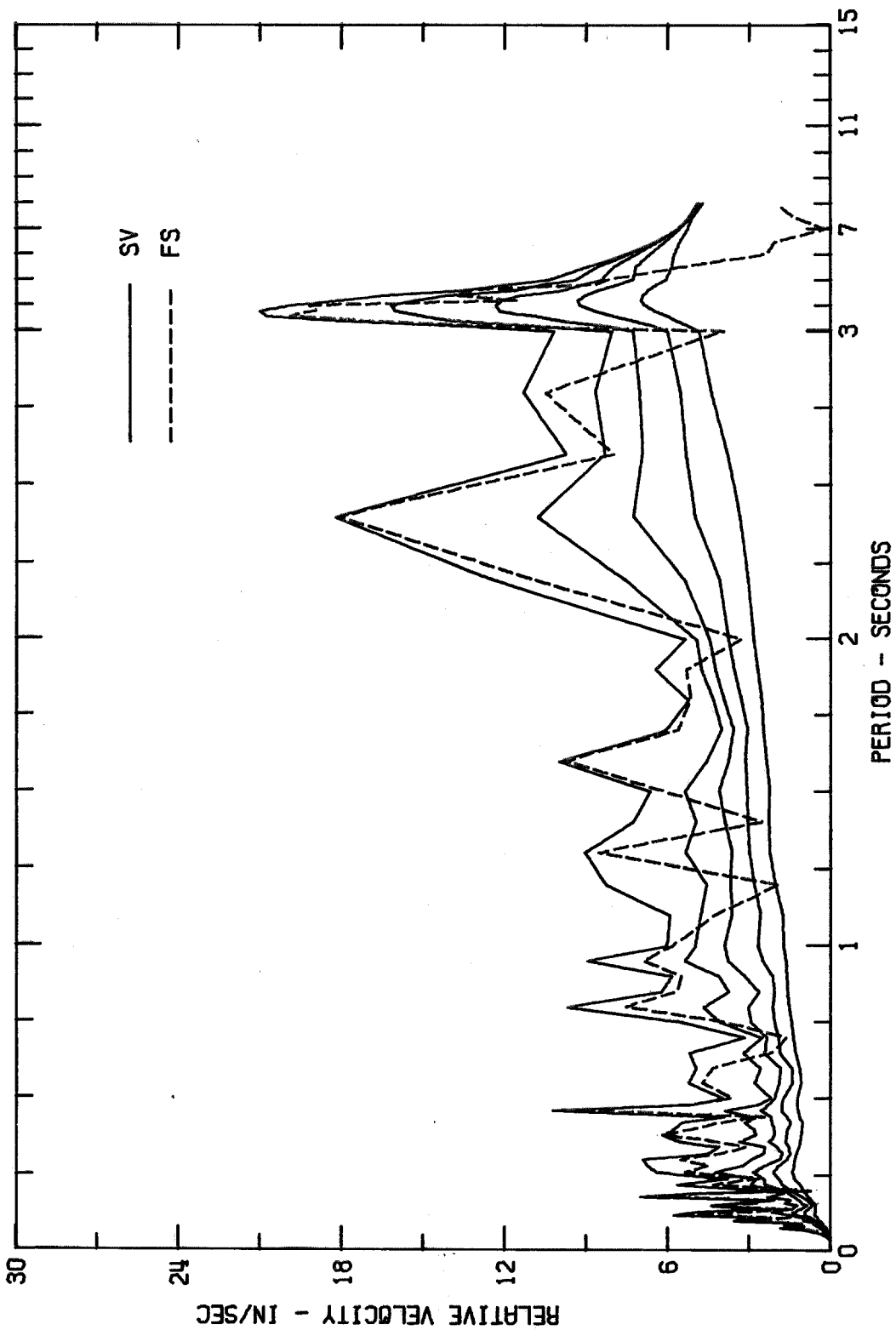
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT					DAMPING = 2 PER CENT					DAMPING = 5 PER CENT					DAMPING = 10 PER CENT					DAMPING = 20 PER CENT				
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV			
0.75	837-2	145-2	116-1	264-3	121-1	961-3	762-2	175-3	805-2	685-3	528-2	125-3	574-2	498-3	408-2	922-4	417-2	425-3	341-2	821-4	356-2			
0.80	108-2	123-2	972-2	197-3	970-2	964-3	751-2	154-3	757-2	728-3	590-2	117-3	572-2	578-3	464-2	939-4	454-2	483-3	355-2	824-4	379-2			
0.85	922-2	160-2	114-1	226-3	118-1	106-2	744-2	151-3	790-2	770-3	578-2	109-3	569-2	634-3	474-2	913-4	469-2	542-3	367-2	820-4	401-2			
0.90	109-1	205-2	133-1	259-3	143-1	148-2	911-2	187-3	103-1	103-2	621-2	131-3	724-2	685-3	485-2	877-4	478-2	603-3	389-2	818-4	421-2			
0.95	185-1	282-2	186-1	320-3	186-1	152-2	867-2	173-3	100-1	111-2	617-2	126-3	736-2	755-3	522-2	872-4	499-2	678-3	419-2	825-4	448-2			
1.00	132-1	262-2	157-1	268-3	164-1	156-2	954-2	160-3	982-2	109-2	749-2	112-3	680-2	928-3	600-2	966-4	583-2	761-3	449-2	837-4	478-2			
1.10	930-2	308-2	180-1	260-3	176-1	225-2	137-1	190-3	128-1	168-2	985-2	142-3	960-2	131-2	736-2	113-3	753-2	924-3	484-2	851-4	528-2			
1.20	178-1	442-2	219-1	314-3	231-1	293-2	137-1	209-3	153-1	198-2	101-1	141-3	103-1	153-2	772-2	111-3	801-2	102-2	552-2	804-4	538-2			
1.30	223-1	508-2	246-1	307-3	245-1	263-2	122-1	159-3	127-1	191-2	994-2	116-3	926-2	152-2	816-2	942-4	737-2	104-2	590-2	712-4	506-2			
1.40	519-2	228-2	105-1	119-3	102-1	199-2	989-2	104-3	895-2	173-2	907-2	911-4	778-2	143-2	787-2	768-4	643-2	102-2	608-2	600-4	459-2			
1.50	164-1	432-2	178-1	196-3	180-1	245-2	891-2	111-3	102-1	181-2	818-2	827-4	760-2	139-2	728-2	647-4	585-2	109-2	593-2	537-4	457-2			
1.60	515-2	323-2	115-1	129-3	126-1	238-2	857-2	953-4	936-2	167-2	732-2	671-4	658-2	130-2	668-2	529-4	512-2	116-2	565-2	506-4	458-2			
1.70	659-2	323-2	101-1	114-3	119-1	244-2	839-2	866-4	903-2	277-2	661-2	630-4	656-2	135-2	610-2	488-4	502-2	126-2	535-2	484-4	468-2			
1.80	796-2	317-2	108-1	100-3	110-1	254-2	925-2	803-4	888-2	211-2	744-2	670-4	737-2	164-2	561-2	529-4	573-2	139-2	505-2	473-4	488-2			
1.90	670-2	365-2	119-1	103-3	121-1	288-2	908-2	818-4	955-2	229-2	732-2	653-4	757-2	184-2	553-2	530-4	610-2	155-2	481-2	467-4	513-2			
2.00	713-2	342-2	102-1	874-4	107-1	272-2	757-2	697-4	855-2	230-2	636-2	593-4	723-2	192-2	513-2	499-4	604-2	171-2	469-2	465-4	540-2			
2.20	269-2	461-2	115-1	975-4	131-1	386-2	962-2	817-4	110-1	313-2	769-2	666-4	896-2	248-2	587-2	534-4	710-2	215-2	559-2	482-4	615-2			
2.40	149-1	774-2	198-1	137-3	202-1	536-2	135-1	952-4	140-1	448-2	106-1	798-4	117-1	365-2	816-2	660-4	957-2	274-2	706-2	521-4	719-2			
2.60	245-1	118-1	283-1	178-3	285-1	750-2	183-1	113-3	181-1	600-2	129-1	912-4	145-1	485-2	110-1	747-4	117-1	342-2	867-2	548-4	827-2			
2.80	248-1	116-1	262-1	152-3	262-1	834-2	198-1	108-3	187-1	736-2	158-1	966-4	165-1	598-2	133-1	796-4	134-1	407-2	100-1	571-4	913-2			
3.00	206-1	122-1	266-1	139-3	256-1	105-1	105-1	119-3	219-1	883-2	179-1	100-3	185-1	698-2	150-1	811-4	146-1	478-2	110-1	574-4	100-1			
3.20	277-1	145-1	280-1	144-3	284-1	122-1	242-1	122-3	239-1	100-1	197-1	101-3	198-1	777-2	160-1	792-4	152-1	548-2	115-1	580-4	107-1			
3.40	297-1	173-1	316-1	153-3	319-1	131-1	256-1	116-3	243-1	110-1	209-1	978-4	203-1	838-2	165-1	753-4	154-1	611-2	115-1	578-4	113-1			
3.60	260-1	157-1	294-1	124-3	275-1	139-1	255-1	110-3	243-1	116-1	208-1	924-4	203-1	903-2	166-1	728-4	157-1	664-2	115-1	565-4	115-1			
3.80	175-1	160-1	263-1	113-3	265-1	142-1	239-1	100-3	235-1	119-1	208-1	850-4	197-1	956-2	168-1	694-4	158-1	703-2	115-1	545-4	116-1			
4.00	280-1	182-1	287-1	116-3	286-1	140-1	223-1	896-4	220-1	118-1	198-1	759-4	185-1	984-2	164-1	648-4	154-1	728-2	116-1	515-4	114-1			
4.20	322-1	215-1	322-1	125-3	322-1	134-1	203-1	781-4	201-1	117-1	180-1	685-4	175-1	994-2	153-1	594-4	148-1	740-2	115-1	482-4	110-1			
4.40	194-1	162-1	234-1	857-4	321-1	129-1	195-1	685-4	185-1	116-1	170-1	617-4	165-1	987-2	149-1	538-4	141-1	741-2	117-1	446-4	105-1			
4.60	156-1	162-1	225-1	787-4	222-1	128-1	186-1	621-4	175-1	113-1	170-1	552-4	155-1	967-2	149-1	484-4	132-1	731-2	118-1	408-4	999-2			
4.80	200-1	160-1	213-1	711-4	209-1	125-1	184-1	556-4	163-1	110-1	169-1	491-4	144-1	938-2	149-1	430-4	122-1	713-2	118-1	370-4	934-2			
5.00	199-1	171-1	223-1	703-4	216-1	119-1	182-1	490-4	150-1	106-1	168-1	437-4	133-1	901-2	148-1	379-4	113-1	688-2	118-1	333-4	865-2			
5.50	174-1	152-1	180-1	516-4	174-1	103-1	171-1	350-4	118-1	931-2	159-1	317-4	106-1	824-2	141-1	288-4	941-2	664-2	115-1	255-4	759-2			
6.00	475-2	107-1	155-1	304-4	112-1	101-1	149-1	287-4	105-1	929-2	141-1	266-4	973-2	819-2	129-1	242-4	858-2	664-2	109-1	218-4	695-2			
6.50	337-2	101-1	126-1	245-4	979-2	956-2	123-1	231-4	924-2	882-2	119-1	215-4	853-2	782-2	114-1	197-4	756-2	643-2	102-1	183-4	621-2			
7.00	187-2	894-2	120-1	186-4	802-2	851-2	115-1	178-4	764-2	796-2	109-1	168-4	715-2	720-2	101-1	156-4	646-2	609-2	942-2	153-4	475-2			
7.50	419-2	742-2	110-1	135-4	622-2	720-2	107-1	131-4	603-2	688-2	103-1	127-4	577-2	643-2	966-2	123-4	538-2	567-2	869-2	128-4	475-2			
8.00	472-2	725-2	995-2	115-4	570-2	692-2	979-2	111-4	544-2	648-2	955-2	105-4	509-2	586-2	912-2	100-4	460-2	555-2	835-2	107-4	412-2			

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

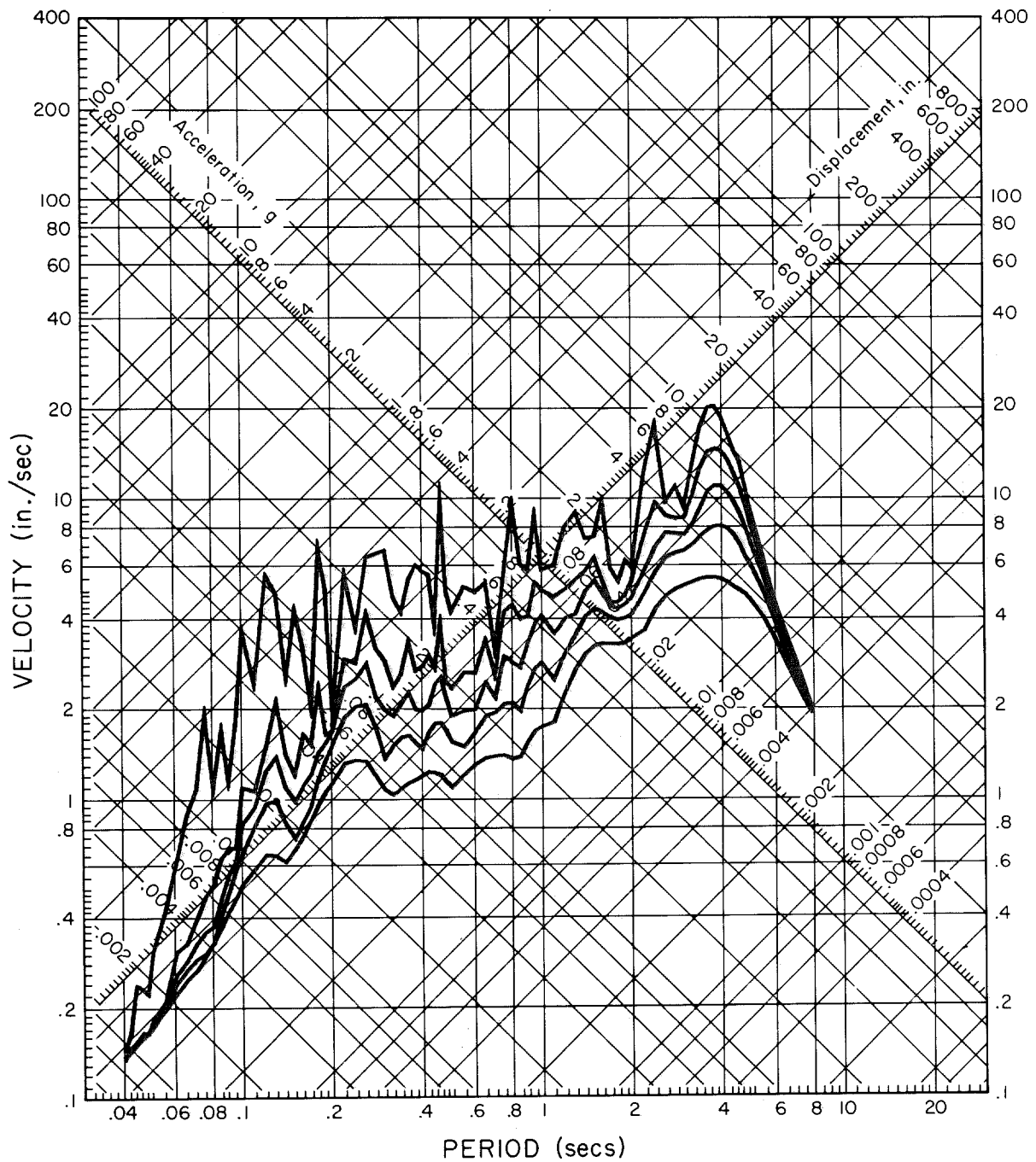


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG112 71.038.0 611 WEST SIXTH STREET, BASEMENT, LOS ANGELES, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.040	590-4	946-6	749-4	605-4	148-3	879-6	435-4	562-4	138-3	899-6	387-4	575-4	141-3	901-6	396-4	578-4	141-3
0.042	395-4	114-5	659-4	861-4	170-3	102-5	488-4	591-4	152-3	101-5	453-4	586-4	151-3	999-6	449-4	581-4	149-3
0.044	913-4	170-5	142-3	899-4	243-3	111-5	523-4	590-4	159-3	110-5	548-4	586-4	158-3	109-5	517-4	582-4	156-3
0.046	293-4	173-5	122-3	840-4	237-3	124-5	805-4	601-4	170-3	119-5	665-4	577-4	163-3	120-5	585-4	582-4	164-3
0.048	130-3	173-5	151-3	771-4	227-3	129-5	771-4	573-4	169-3	129-5	722-4	574-4	169-3	131-5	645-4	584-4	171-3
0.050	129-3	252-5	209-3	103-3	316-3	151-5	894-4	620-4	189-3	141-5	778-4	579-4	177-3	143-5	699-4	588-4	180-3
0.055	293-3	382-5	347-3	129-3	436-3	189-5	108-3	638-4	216-3	182-5	775-4	617-4	208-3	182-5	893-4	621-4	208-3
0.060	331-3	605-5	492-3	172-3	634-3	302-5	189-3	859-4	316-3	253-5	147-3	724-4	265-3	236-5	125-3	669-4	247-3
0.065	571-3	938-5	798-3	227-3	907-3	347-5	272-3	842-4	335-3	304-5	185-3	735-4	294-3	284-5	157-3	691-4	275-3
0.070	847-3	123-4	989-3	258-3	111-2	455-5	307-3	943-4	408-3	374-5	235-3	776-4	336-3	330-5	188-3	686-4	296-3
0.075	175-2	237-4	186-2	431-3	198-2	579-5	400-3	105-3	485-3	439-5	251-3	796-4	368-3	371-5	205-3	685-4	311-3
0.080	919-3	142-4	105-2	227-3	111-2	677-5	441-3	108-3	531-3	490-5	299-3	784-4	384-3	431-5	230-3	698-4	338-3
0.085	149-2	239-4	173-2	338-3	176-2	882-5	556-3	124-3	651-3	648-5	363-3	920-4	479-3	570-5	269-3	812-4	421-3
0.090	107-2	168-4	114-2	212-3	117-2	101-4	634-3	127-3	703-3	827-5	423-3	105-3	577-3	723-5	361-3	935-4	505-3
0.095	171-2	284-4	182-2	322-3	188-2	106-4	659-3	121-3	703-3	966-5	493-3	110-3	639-3	901-5	453-3	102-3	596-3
0.100	358-2	600-4	359-2	614-3	377-2	179-4	101-2	184-3	112-2	134-4	730-3	139-3	847-3	107-4	547-3	113-3	675-3
0.110	138-2	431-4	240-2	364-3	246-2	191-4	102-2	161-3	109-2	170-4	916-3	144-3	972-3	146-4	747-3	126-3	834-3
0.120	570-2	111-3	581-2	789-3	582-2	292-4	145-2	206-3	153-2	244-4	125-2	172-3	143-2	190-4	932-3	134-3	996-3
0.130	290-2	103-3	485-2	626-3	500-2	452-4	217-2	275-3	218-2	296-4	143-2	181-3	112-2	188-4	861-3	126-3	845-3
0.140	159-2	579-4	248-2	302-3	259-2	322-4	139-2	168-3	144-2	250-4	110-2	129-3	112-2	188-4	861-3	126-3	845-3
0.150	435-2	106-3	443-2	483-3	445-2	295-4	120-2	134-3	123-2	240-4	882-3	108-3	100-2	181-4	694-3	824-4	759-3
0.160	268-2	840-4	328-2	335-3	329-2	429-4	170-2	172-3	168-2	292-4	107-2	117-3	114-2	220-4	761-3	895-4	867-3
0.170	206-2	561-4	206-2	198-3	207-2	423-4	147-2	150-3	156-2	339-4	119-2	120-3	125-2	264-4	854-3	944-4	977-3
0.180	664-2	204-3	702-2	645-3	713-2	695-4	235-2	220-3	242-2	424-4	133-2	135-3	148-2	346-4	106-2	109-3	120-2
0.190	477-2	157-3	503-2	447-3	522-2	510-4	169-2	144-3	168-2	482-4	155-2	138-3	159-2	421-4	128-2	121-3	139-2
0.200	724-3	631-4	200-2	161-3	198-2	553-4	178-2	141-3	173-2	549-4	163-2	140-3	172-2	496-4	141-2	128-3	156-2
0.220	433-2	205-3	569-2	433-3	585-2	105-3	296-2	222-3	301-2	852-4	240-2	179-3	243-2	674-4	178-2	143-3	192-2
0.240	261-2	146-3	375-2	259-3	382-2	111-3	278-2	198-3	292-2	989-4	247-2	179-3	259-2	800-4	191-2	148-3	209-2
0.260	537-2	274-3	646-2	415-3	663-2	179-3	428-2	271-3	434-2	120-3	286-2	186-3	291-2	877-4	211-2	135-3	212-2
0.280	449-2	303-3	674-2	395-3	680-2	145-3	323-2	191-3	327-2	997-4	247-2	132-3	223-2	787-4	197-2	102-3	176-2
0.300	554-2	333-3	691-2	379-3	698-2	141-3	288-2	161-3	295-2	971-4	187-2	111-3	203-2	671-4	164-2	789-4	140-2
0.320	404-2	247-3	449-2	246-3	485-2	123-3	243-2	123-3	242-2	990-4	178-2	100-3	194-2	788-4	151-2	807-4	154-2
0.340	314-2	234-3	410-2	207-3	432-2	146-3	241-2	128-3	270-2	115-3	196-2	101-3	213-2	891-4	154-2	794-4	164-2
0.360	427-2	324-3	560-2	255-3	566-2	198-3	337-2	156-3	346-2	133-3	227-2	105-3	232-2	959-4	166-2	764-4	167-2
0.380	618-2	379-3	623-2	268-3	627-2	166-3	275-2	118-3	274-2	123-3	207-2	881-4	204-2	957-4	164-2	689-4	158-2
0.400	501-2	378-3	578-2	241-3	594-2	181-3	282-2	116-3	284-2	129-3	209-2	824-4	202-2	966-4	161-2	638-4	151-2
0.420	407-2	387-3	547-2	224-3	580-2	207-3	317-2	120-3	311-2	141-3	217-2	830-4	211-2	115-3	147-2	681-4	172-2
0.440	243-2	275-3	390-2	145-3	394-2	196-3	276-2	103-3	280-2	173-3	220-2	926-4	248-2	128-3	159-2	700-4	183-2
0.460	934-2	754-3	102-1	364-3	103-1	293-3	391-2	141-3	400-2	192-3	255-2	934-4	262-2	135-3	181-2	666-4	184-2
0.480	510-2	389-3	509-2	172-3	509-2	192-3	263-2	852-4	252-2	170-3	232-2	753-4	222-2	132-3	182-2	596-4	173-2
0.500	361-2	345-3	395-2	141-3	433-2	190-3	220-2	785-4	239-2	154-3	209-2	638-4	193-2	126-3	176-2	529-4	159-2
0.550	473-2	462-3	522-2	156-3	528-2	237-3	280-2	801-4	271-2	176-3	191-2	597-4	201-2	134-3	143-2	462-4	153-2
0.600	437-2	485-3	496-2	137-3	508-2	257-3	259-2	732-4	269-2	195-3	183-2	555-4	204-2	164-3	143-2	477-4	172-2
0.650	216-2	565-3	519-2	136-3	546-2	363-3	322-2	879-4	351-2	259-3	245-2	633-4	221-2	200-3	186-2	494-4	193-2
0.700	165-2	357-3	312-2	745-4	320-2	294-3	253-2	615-4	264-2	248-3	234-2	520-4	252-2	221-3	192-2	468-4	199-2

DAMPING = 0 PER CENT

DAMPING = 2 PER CENT

DAMPING = 5 PER CENT

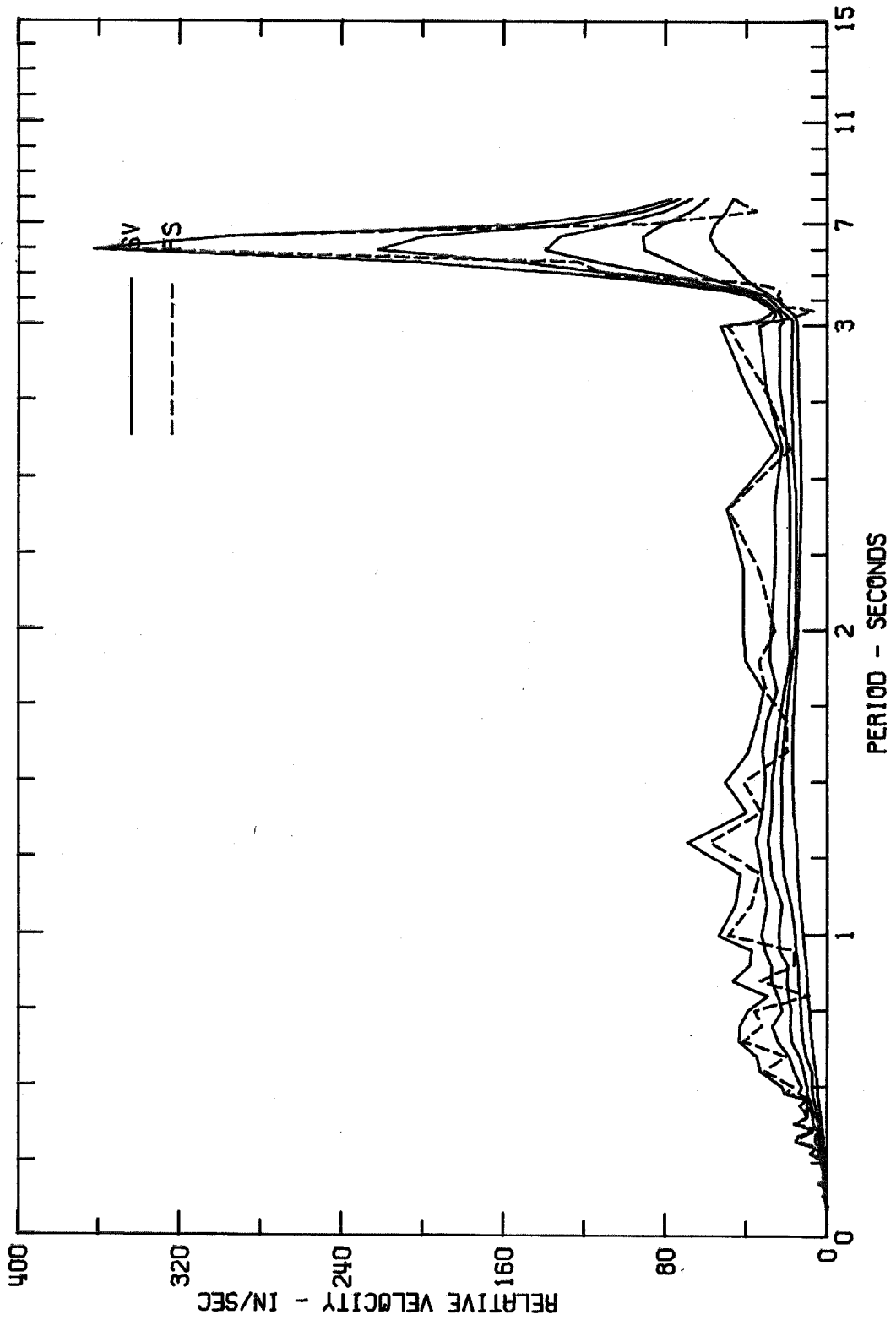
DAMPING = 10 PER CENT

DAMPING = 20 PER CENT

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	391-2	723-3	551-2	131-3	605-2	522-3	409-2	952-4	437-2	368-3	296-2	670-4	308-2	254-3	209-2	471-4	213-2	171-3	146-2	328-4	143-2
0.80	757-2	126-2	974-2	202-3	993-2	587-3	468-2	941-4	461-2	372-3	305-2	596-4	292-2	272-3	214-2	448-4	213-2	177-3	153-2	318-4	139-2
0.85	567-2	847-3	619-2	120-3	626-2	556-3	377-2	787-4	411-2	380-3	266-2	540-4	281-2	272-3	207-2	400-4	201-2	192-3	159-2	289-4	142-2
0.90	549-2	855-3	585-2	108-3	597-2	604-3	412-2	764-4	422-2	489-3	315-2	620-4	341-2	353-3	215-2	452-4	246-2	229-3	163-2	305-4	160-2
0.95	691-2	137-2	897-2	156-3	910-2	826-3	538-2	936-4	546-2	601-3	378-2	683-4	397-2	423-3	250-2	487-4	280-2	261-3	166-2	314-4	173-2
1.00	584-2	955-3	600-2	976-4	600-2	820-3	499-2	839-4	515-2	672-3	390-2	691-4	422-2	465-3	269-2	485-4	292-2	284-3	176-2	310-4	178-2
1.10	428-2	108-2	593-2	920-4	621-2	854-3	479-2	722-4	488-2	642-3	365-2	544-4	367-2	447-3	258-2	385-4	255-2	323-3	178-2	283-4	184-2
1.20	191-2	159-2	829-2	113-3	835-2	990-3	458-2	703-4	518-2	790-3	370-2	563-4	413-2	602-3	283-2	433-4	315-2	444-3	204-2	327-4	232-2
1.30	857-2	191-2	907-2	116-3	926-2	115-2	534-2	698-4	557-2	884-3	364-2	536-4	427-2	755-3	302-2	461-4	365-2	576-3	226-2	362-4	278-2
1.40	253-2	169-2	726-2	884-4	760-2	133-2	496-2	695-4	597-2	114-2	392-2	597-4	512-2	934-3	306-2	493-4	419-2	698-3	229-2	381-4	313-2
1.50	614-2	183-2	664-2	835-4	769-2	157-2	538-2	718-4	661-2	132-2	413-2	604-4	553-2	106-2	310-2	495-4	446-2	797-3	226-2	387-4	333-2
1.60	979-2	257-2	100-1	102-3	101-1	140-2	457-2	561-4	551-2	127-2	376-2	511-4	500-2	110-2	317-2	452-4	433-2	865-3	238-2	377-4	339-2
1.70	562-2	164-2	603-2	582-4	608-2	125-2	403-2	445-4	464-2	122-2	359-2	435-4	453-2	112-2	306-2	405-4	415-2	917-3	249-2	358-4	339-2
1.80	516-2	157-2	523-2	495-4	548-2	134-2	434-2	425-4	469-2	127-2	394-2	405-4	446-2	116-2	332-2	375-4	407-2	968-3	256-2	337-4	338-2
1.90	533-2	195-2	646-2	553-4	646-2	150-2	479-2	427-4	498-2	139-2	426-2	396-4	460-2	125-2	359-2	358-4	414-2	102-2	270-2	317-4	340-2
2.00	328-2	193-2	534-2	495-4	608-2	176-2	496-2	451-4	553-2	155-2	447-2	397-4	487-2	135-2	380-2	353-4	427-2	112-2	285-2	301-4	354-2
2.20	110-1	439-2	124-1	927-4	125-1	272-2	760-2	577-4	779-2	209-2	540-2	444-4	598-2	176-2	413-2	379-4	503-2	132-2	308-2	258-4	377-2
2.40	181-1	700-2	182-1	124-3	183-1	382-2	108-1	679-4	100-1	272-2	727-2	445-4	713-2	226-2	501-2	406-4	594-2	170-2	337-2	316-4	446-2
2.60	800-2	414-2	974-2	627-4	100-1	373-2	831-2	565-4	902-2	327-2	693-2	498-4	792-2	273-2	535-2	422-4	661-2	204-2	381-2	333-4	494-2
2.80	105-1	504-2	113-1	658-4	113-1	393-2	867-2	513-4	883-2	350-2	707-2	459-4	785-2	303-2	557-2	406-4	682-2	231-2	441-2	331-4	520-2
3.00	394-2	457-2	101-1	519-4	957-2	424-2	804-2	482-4	888-2	373-2	730-2	426-4	781-2	331-2	605-2	385-4	694-2	255-2	486-2	320-4	534-2
3.20	130-1	689-2	136-1	688-4	135-1	539-2	109-1	539-4	105-1	434-2	835-2	435-4	853-2	370-2	661-2	375-4	727-2	279-2	528-2	307-4	548-2
3.40	173-1	973-2	180-1	861-4	179-1	713-2	139-1	633-4	131-1	522-2	998-2	464-4	965-2	417-2	731-2	377-4	772-2	303-2	571-2	288-4	561-2
3.60	199-1	118-1	208-1	935-4	206-1	847-2	150-1	663-4	147-1	625-2	109-1	497-4	109-1	464-2	803-2	373-4	809-2	325-2	603-2	278-4	567-2
3.80	189-1	126-1	210-1	898-4	209-1	916-2	160-1	649-4	151-1	686-2	122-1	489-4	113-1	503-2	868-2	362-4	832-2	342-2	648-2	262-4	567-2
4.00	192-1	122-1	198-1	781-4	192-1	945-2	161-1	604-4	148-1	719-2	123-1	462-4	113-1	532-2	924-2	346-4	835-2	356-2	684-2	245-4	560-2
4.20	115-1	113-1	180-1	658-4	169-1	928-2	152-1	539-4	138-1	717-2	121-1	418-4	107-1	547-2	935-2	324-4	819-2	365-2	699-2	233-4	547-2
4.40	137-1	104-1	164-1	549-4	148-1	873-2	140-1	461-4	124-1	701-2	113-1	372-4	100-1	545-2	908-2	296-4	779-2	368-2	694-2	217-4	526-2
4.60	132-1	100-1	136-1	483-4	136-1	818-2	115-1	398-4	111-1	672-2	981-2	327-4	918-2	531-2	852-2	262-4	725-2	376-2	675-2	200-4	514-2
4.80	876-2	865-2	119-1	384-4	113-1	746-2	106-1	331-4	976-2	632-2	809-2	282-4	827-2	506-2	727-2	231-4	663-2	380-2	644-2	175-4	497-2
5.00	821-2	742-2	103-1	303-4	932-2	665-2	933-2	272-4	836-2	508-2	798-2	173-4	581-2	451-2	718-2	159-4	515-2	364-2	587-2	142-4	416-2
5.50	549-2	583-2	891-2	197-4	666-2	551-2	853-2	186-4	629-2	508-2	715-2	120-4	438-2	388-2	667-2	116-4	407-2	337-2	578-2	112-4	353-2
6.00	236-2	454-2	758-2	129-4	476-2	439-2	742-2	125-4	460-2	418-2	715-2	120-4	438-2	388-2	667-2	116-4	407-2	337-2	578-2	112-4	353-2
6.50	209-2	387-2	642-2	938-5	374-2	373-2	640-2	905-5	361-2	353-2	632-2	875-5	342-2	331-2	610-2	859-5	320-2	308-2	555-2	905-5	297-2
7.00	260-3	339-2	559-2	709-5	304-2	331-2	563-2	695-5	297-2	320-2	565-2	684-5	287-2	300-2	560-2	676-5	270-2	283-2	530-2	743-5	254-2
7.50	142-2	295-2	505-2	537-5	247-2	293-2	512-2	535-5	245-2	287-2	518-2	537-5	241-2	277-2	522-2	552-5	232-2	264-2	508-2	631-5	221-2
8.00	198-2	259-2	472-2	415-5	203-2	260-2	480-2	418-5	204-2	259-2	488-2	428-5	203-2	255-2	494-2	455-5	200-2	251-2	490-2	549-5	197-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N38E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

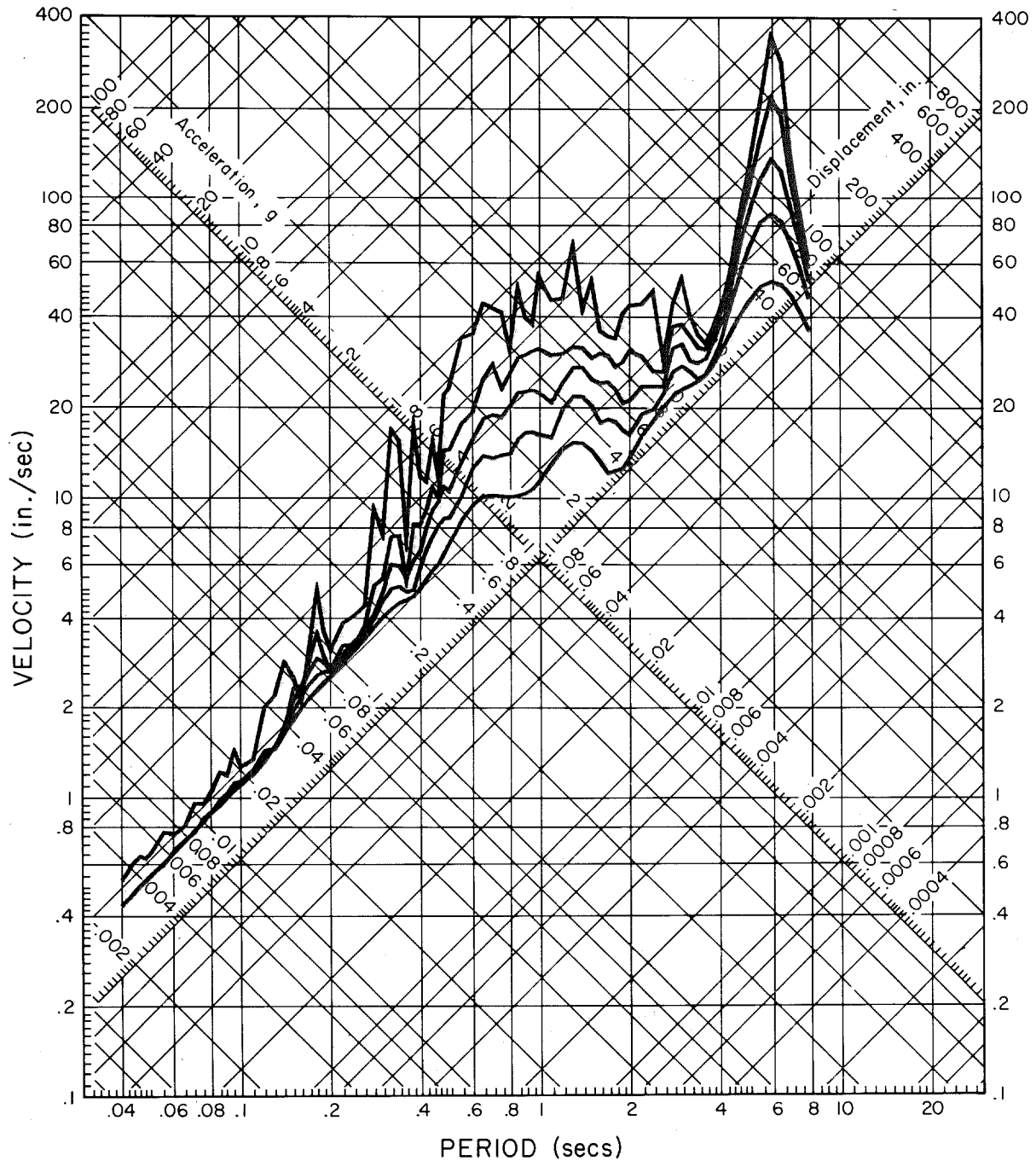


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N38E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N38E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT										DAMPING = 2 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV								
0.040	112-3	345-5	135-3	221-3	543-3	284-5	993-4	181-3	446-3	284-5	937-4	181-3	446-3	284-5	882-4	181-3	446-3	284-5	882-4	181-3	446-3	284-5	882-4	181-3	446-3	284-5	882-4	181-3	446-3	284-5	882-4	181-3	446-3	284-5	882-4	181-3	446-3	284-5	882-4	181-3	446-3								
0.042	132-3	392-5	149-3	227-3	587-3	313-5	105-3	181-3	468-3	313-5	967-4	181-3	468-3	313-5	912-4	181-3	468-3	313-5	912-4	181-3	468-3	313-5	912-4	181-3	468-3	313-5	912-4	181-3	468-3	313-5	912-4	181-3	468-3	313-5	912-4	181-3	468-3	313-5	912-4	181-3	468-3								
0.044	144-3	438-5	171-3	231-3	625-3	345-5	111-3	182-3	493-3	345-5	102-3	182-3	493-3	345-5	940-4	182-3	493-3	345-5	940-4	182-3	493-3	345-5	940-4	182-3	493-3	345-5	940-4	182-3	493-3	345-5	940-4	182-3	493-3	345-5	940-4	182-3	493-3	345-5	940-4	182-3	493-3								
0.046	133-3	476-5	166-3	230-3	651-3	379-5	113-3	183-3	518-3	379-5	108-3	183-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3	518-3	379-5	100-3	182-3					
0.048	128-3	489-5	177-3	217-3	640-3	414-5	120-3	183-3	542-3	413-5	113-3	183-3	540-3	411-5	105-3	182-3	538-3	410-5	912-4	182-3	538-3	410-5	912-4	182-3	538-3	410-5	912-4	182-3	538-3	410-5	912-4	182-3	538-3	410-5	912-4	182-3	538-3	410-5	912-4	182-3	538-3	410-5	912-4	182-3	538-3				
0.050	132-3	534-5	157-3	218-3	672-3	448-5	123-3	183-3	563-3	448-5	116-3	183-3	563-3	447-5	109-3	183-3	561-3	445-5	970-4	182-3	561-3	445-5	970-4	182-3	561-3	445-5	970-4	182-3	561-3	445-5	970-4	182-3	561-3	445-5	970-4	182-3	561-3	445-5	970-4	182-3	561-3	445-5	970-4	182-3	561-3				
0.055	192-3	684-5	269-3	231-3	782-3	532-5	138-3	180-3	608-3	537-5	125-3	181-3	613-3	540-5	116-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	617-3	540-5	104-3	182-3	
0.060	124-3	738-5	201-3	209-3	773-3	657-5	149-3	186-3	688-3	647-5	140-3	183-3	677-3	644-5	129-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	675-3	644-5	112-3	183-3	
0.065	194-4	854-5	197-3	206-3	825-3	763-5	158-3	184-3	738-3	758-5	152-3	183-3	733-3	733-3	141-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	732-3	757-5	123-3	183-3	
0.070	286-3	109-4	358-3	227-3	980-3	868-5	170-3	181-3	779-3	879-5	157-3	183-3	789-3	882-5	148-3	185-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	854-3	880-5	132-3	184-3	
0.075	882-4	116-4	258-3	212-3	978-3	103-4	184-3	188-3	869-3	102-4	168-3	186-3	858-3	102-4	154-3	185-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	854-3	101-4	139-3	184-3	
0.080	392-3	139-4	408-3	222-3	109-2	117-4	195-3	187-3	921-3	117-4	182-3	187-3	922-3	116-4	168-3	186-3	917-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	908-3	115-4	145-3	185-3	
0.085	439-3	168-4	471-3	239-3	124-2	136-4	214-3	193-3	100-2	133-4	194-3	189-3	989-3	105-2	148-4	180-3	978-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	
0.090	290-3	174-4	367-3	220-3	121-2	152-4	235-3	191-3	106-2	150-4	204-3	190-3	105-2	148-4	180-3	978-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3	967-3	130-4	156-3	185-3		
0.095	553-3	221-4	573-3	251-3	146-2	173-4	264-3	196-3	114-2	168-4	214-3	190-3	111-2	165-4	200-3	187-3	109-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	107-2	163-4	176-3	185-3	
0.100	287-3	206-4	452-3	211-3	129-2	185-4	285-3	189-3	116-2	184-4	226-3	188-3	115-2	181-4	215-3	186-3	114-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	113-2	180-4	192-3	184-3	
0.110	433-3	239-4	478-3	202-3	136-2	222-4	341-3	187-3	127-2	215-4	306-3	182-3	123-2	213-4	277-3	180-3	122-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	123-2	216-4	244-3	183-3	
0.120	453-3	392-4	903-3	278-3	205-2	279-4	483-3	199-3	146-2	264-4	363-3	188-3	138-2	259-4	332-3	184-3	135-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	136-2	260-4	295-3	185-3	
0.130	796-3	468-4	128-2	283-3	226-2	307-4	576-3	185-3	148-2	313-4	450-3	190-3	151-2	316-4	401-3	191-3	152-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	151-2	313-4	357-3	190-3	
0.140	202-2	654-4	205-2	341-3	293-2	373-4	674-3	195-3	167-2	393-4	552-3	204-3	176-2	387-4	517-3	203-3	173-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	168-2	375-4	420-3	197-3	
0.150	108-2	619-4	154-2	281-3	259-2	570-4	846-3	119-2	258-3	517-4	816-3	236-3	216-2	478-4	643-3	217-3	200-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	186-2	444-4	491-3	204-3	
0.160	241-3	541-4	134-2	216-3	212-2	615-4	846-																																										

IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N38E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	362-1	507-2	395-1	923-3	425-1	283-2	227-1	517-3	237-1	228-2	182-1	416-3	191-1	170-2	133-1	316-3	142-1
0.80	880-2	411-2	294-1	657-3	322-1	343-2	246-1	549-3	269-1	266-2	193-1	427-3	209-1	183-2	139-1	299-3	144-1
0.85	332-1	698-2	471-1	988-3	516-1	406-2	277-1	575-3	300-1	312-2	201-1	443-3	230-1	218-2	144-1	313-3	161-1
0.90	165-1	585-2	386-1	738-3	408-1	442-2	279-1	558-3	308-1	332-2	197-1	421-3	231-1	243-2	144-1	312-3	169-1
0.95	166-1	587-2	372-1	665-3	388-1	480-2	310-1	545-3	317-1	355-2	236-1	405-3	235-1	257-2	158-1	297-3	170-1
1.00	493-1	899-2	537-1	920-3	565-1	514-2	327-1	525-3	322-1	366-2	243-1	376-3	230-1	266-2	160-1	276-3	167-1
1.10	377-1	814-2	454-1	688-3	465-1	537-2	298-1	454-3	307-1	375-2	226-1	318-3	214-1	286-2	180-1	247-3	163-1
1.20	336-1	902-2	430-1	641-3	472-1	594-2	327-1	422-3	311-1	477-2	277-1	340-3	249-1	389-2	218-1	282-3	203-1
1.30	580-1	147-1	694-1	894-3	714-1	678-2	352-1	410-3	327-1	580-2	295-1	353-3	280-1	463-2	228-1	286-3	224-1
1.40	327-1	963-2	399-1	502-3	432-1	723-2	321-1	378-3	324-1	622-2	273-1	326-3	279-1	497-2	226-1	266-3	223-1
1.50	412-1	129-1	504-1	590-3	544-1	719-2	305-1	327-3	301-1	609-2	272-1	278-3	255-1	495-2	230-1	231-3	207-1
1.60	199-1	943-2	391-1	377-3	370-1	794-2	323-1	317-3	312-1	630-2	255-1	252-3	247-1	466-2	221-1	192-3	183-1
1.70	202-1	962-2	347-1	340-3	355-1	828-2	296-1	293-3	306-1	676-2	239-1	240-3	249-1	507-2	206-1	182-3	187-1
1.80	304-1	100-1	312-1	316-3	349-1	804-2	248-1	254-3	280-1	677-2	212-1	215-3	236-1	528-2	189-1	170-3	184-1
1.90	339-1	127-1	404-1	360-3	420-1	882-2	284-1	250-3	291-1	644-2	186-1	183-3	213-1	523-2	173-1	151-3	173-1
2.00	260-1	142-1	419-1	364-3	447-1	101-1	276-1	259-3	318-1	690-2	195-1	177-3	217-1	533-2	159-1	138-3	167-1
2.20	338-1	158-1	413-1	334-3	451-1	107-1	256-1	226-3	305-1	845-2	185-1	179-3	241-1	684-2	152-1	147-3	195-1
2.40	489-1	191-1	498-1	340-3	501-1	104-1	260-1	184-3	272-1	924-2	186-1	164-3	242-1	775-2	155-1	140-3	202-1
2.60	184-1	123-1	244-1	186-3	298-1	111-1	226-1	169-3	270-1	100-1	203-1	151-3	241-1	951-2	173-1	145-3	229-1
3.00	494-1	265-1	528-1	301-3	555-1	186-1	336-1	211-3	389-1	159-1	239-1	182-3	335-1	135-1	175-1	156-3	283-1
3.20	238-1	210-1	332-1	210-3	414-1	180-1	269-1	180-3	354-1	149-1	219-1	150-3	294-1	138-1	174-1	140-3	271-1
3.40	140-1	194-1	286-1	172-3	359-1	176-1	259-1	156-3	326-1	156-1	228-1	139-3	289-1	138-1	196-1	124-3	256-1
3.60	692-2	192-1	267-1	152-3	336-1	184-1	260-1	145-3	321-1	171-1	246-1	135-3	299-1	152-1	224-1	121-3	265-1
3.80	240-1	228-1	299-1	161-3	377-1	218-1	291-1	154-3	361-1	203-1	276-1	144-3	336-1	180-1	251-1	129-3	297-1
4.00	231-1	275-1	345-1	176-3	432-1	261-1	331-1	167-3	410-1	240-1	310-1	154-3	378-1	209-1	277-1	136-3	329-1
4.20	245-1	331-1	395-1	191-3	495-1	309-1	374-1	179-3	463-1	281-1	344-1	163-3	420-1	260-1	306-1	153-3	389-1
4.40	237-1	422-1	503-1	223-3	603-1	394-1	456-1	208-3	563-1	361-1	408-1	191-3	516-1	320-1	383-1	172-3	458-1
4.60	302-1	588-1	693-1	284-3	803-1	529-1	608-1	255-3	722-1	461-1	548-1	223-3	630-1	385-1	472-1	189-3	526-1
4.80	544-1	774-1	920-1	343-3	101	0	685-1	794-1	897-1	583-1	687-1	259-3	763-1	466-1	559-1	210-3	610-1
5.00	109	0	990-1	405-3	124	0	843-1	977-1	345-3	106	0	706-1	803-1	547-1	630-1	227-3	687-1
5.50	123	0	185	0	628-3	212	0	140	0	153	0	475-3	160	0	104	0	744-1
6.00	362	0	346	0	984-3	362	0	214	0	222	0	610-3	224	0	133	0	870-1
6.50	295	0	305	0	738-3	294	0	200	0	199	0	486-3	193	0	131	0	885-1
7.00	875-1	156	0	326-3	140	0	131	0	128	0	104	0	220-3	796-1	808-1	170-3	714-1
7.50	349-1	108	0	197-3	911-1	986-1	905-1	179-3	826-1	860-1	800-1	157-3	942-1	703-1	670-1	130-3	589-1
8.00	456-1	807-1	770-1	129-3	634-1	757-1	724-1	121-3	594-1	692-1	667-1	111-3	543-1	603-1	591-1	989-4	473-1
																	873-4
																	372-1

DAMPING = 0 PER CENT

DAMPING = 2 PER CENT

DAMPING = 5 PER CENT

DAMPING = 10 PER CENT

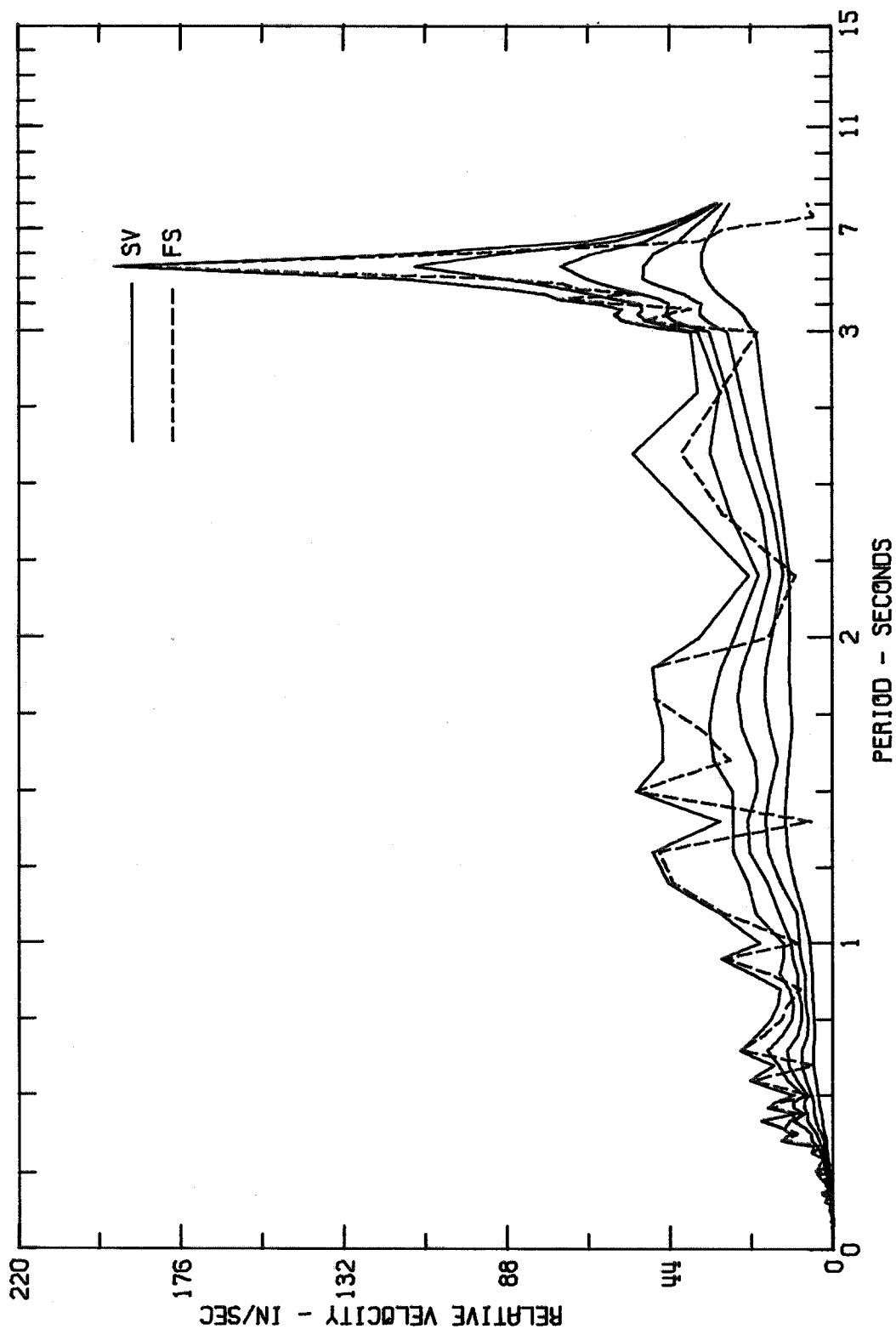
DAMPING = 20 PER CENT

RELATIVE VELOCITY RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N52W
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL





SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIGL13 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N52W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

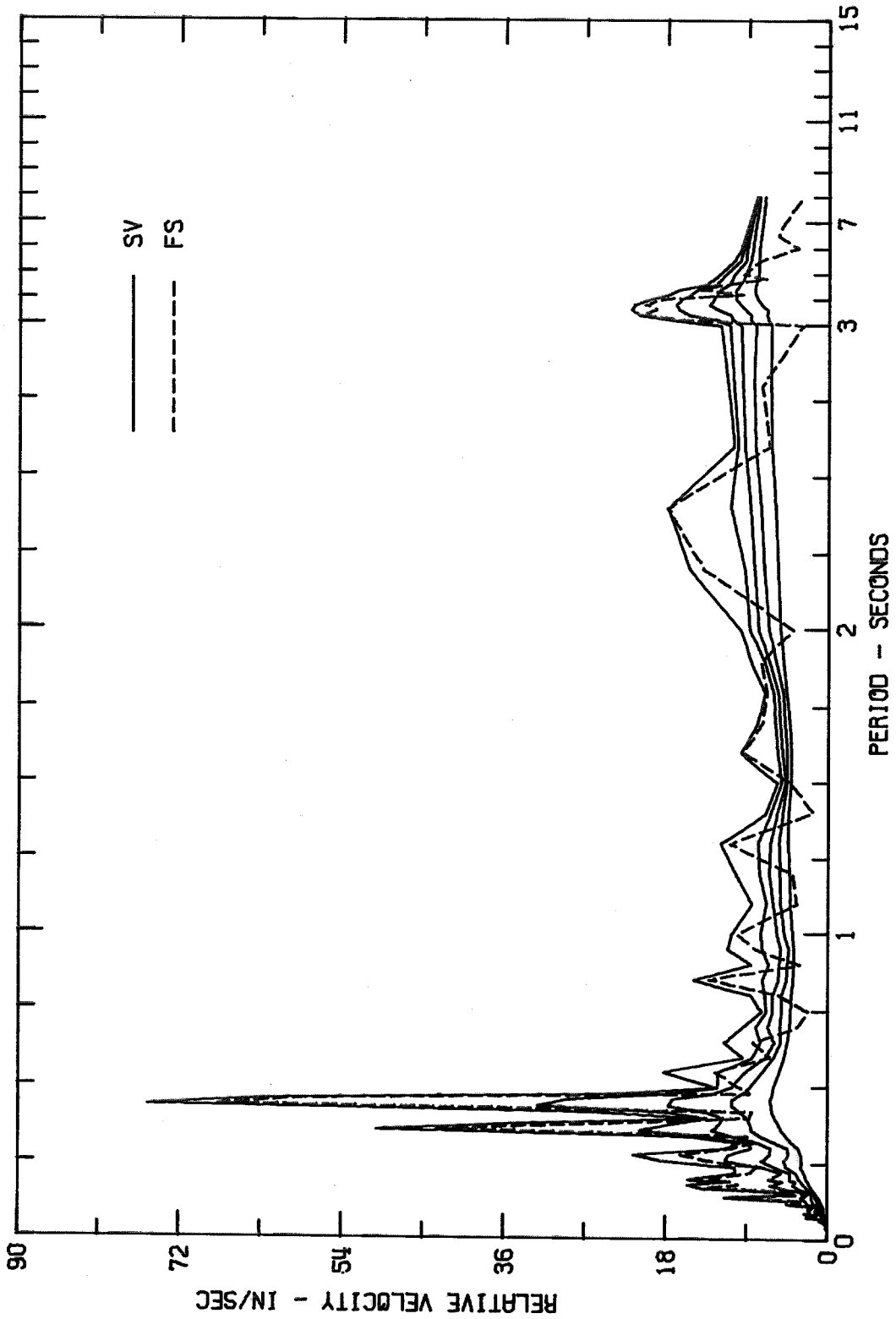
PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT			
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA
0.040	897-4	216-5	890-4	138-3	340-3	174-5	665-4	111-3	274-3	174-5	630-4	111-3	274-3	174-5	590-4	111-3	274-3	174-5	526-4	111-3
0.042	698-4	233-5	913-4	135-3	349-3	193-5	714-4	112-3	289-3	192-5	679-4	111-3	288-3	192-5	625-4	111-3	287-3	192-5	546-4	111-3
0.044	134-3	271-5	117-3	143-3	388-3	210-5	759-4	111-3	300-3	211-5	723-4	111-3	301-3	211-5	668-4	111-3	301-3	211-5	575-4	111-3
0.046	942-4	288-5	110-3	139-3	394-3	230-5	799-4	111-3	314-3	230-5	763-4	111-3	314-3	230-5	707-4	111-3	315-3	230-5	612-4	111-3
0.048	114-3	320-5	139-3	142-3	419-3	250-5	836-4	111-3	328-3	250-5	799-4	111-3	328-3	251-5	743-4	111-3	329-3	251-5	646-4	111-3
0.050	920-4	322-5	112-3	132-3	405-3	274-5	846-4	112-3	344-3	273-5	802-4	111-3	343-3	273-5	745-4	111-3	343-3	273-5	664-4	111-3
0.055	152-3	458-5	176-3	154-3	523-3	334-5	965-4	113-3	382-3	334-5	919-4	113-3	381-3	332-5	850-4	112-3	380-3	331-5	733-4	112-3
0.060	222-3	559-5	227-3	158-3	583-3	402-5	106-3	114-3	421-3	398-5	101-3	113-3	417-3	397-5	944-4	113-3	416-3	395-5	822-4	112-3
0.065	276-3	604-5	283-3	146-3	583-3	468-5	114-3	113-3	452-3	468-5	109-3	113-3	453-3	467-5	102-3	113-3	451-3	465-5	899-4	112-3
0.070	749-4	696-5	253-3	145-3	625-3	547-5	124-3	114-3	491-3	544-5	118-3	113-3	488-3	541-5	109-3	113-3	486-3	539-5	939-4	112-3
0.075	368-3	111-4	505-3	202-3	934-3	673-5	135-3	122-3	564-3	625-5	129-3	114-3	524-3	620-5	120-3	112-3	519-3	619-5	103-3	112-3
0.080	155-3	756-5	168-3	120-3	593-3	713-5	145-3	114-3	560-3	705-5	139-3	112-3	554-3	704-5	129-3	112-3	553-3	704-5	112-3	112-3
0.085	107-3	964-5	215-3	136-3	712-3	797-5	153-3	112-3	589-3	791-5	147-3	112-3	585-3	792-5	137-3	112-3	585-3	796-5	120-3	113-3
0.090	148-3	104-4	261-3	132-3	732-3	920-5	161-3	116-3	642-3	874-5	154-3	110-3	610-3	887-5	144-3	112-3	619-3	894-5	127-3	113-3
0.095	493-3	161-4	626-3	182-3	106-2	101-4	195-3	115-3	671-3	998-5	165-3	113-3	660-3	995-5	153-3	112-3	658-3	100-4	134-3	113-3
0.100	786-4	128-4	268-3	131-3	810-3	131-3	195-3	113-3	710-3	111-4	170-3	113-3	699-3	111-4	156-3	113-3	698-3	111-4	139-3	114-3
0.110	355-3	201-4	563-3	170-3	115-2	134-4	288-3	113-3	769-3	136-4	194-3	115-3	780-3	137-4	180-3	116-3	785-3	137-4	157-3	116-3
0.120	415-3	227-4	460-3	161-3	118-2	192-4	276-3	136-3	100-2	178-4	232-3	126-3	933-3	170-4	208-3	121-3	894-3	166-4	185-3	119-3
0.130	102-2	358-4	105-2	217-3	173-2	215-4	365-3	130-3	104-2	203-4	289-3	123-3	985-3	202-4	251-3	122-3	976-3	199-4	227-3	121-3
0.140	634-3	375-4	900-3	195-3	168-2	250-4	452-3	130-3	112-2	239-4	340-3	124-3	107-2	238-4	305-3	124-3	108-2	234-4	268-3	123-3
0.150	843-3	344-4	978-3	156-3	144-2	281-4	402-4	127-3	117-2	287-4	494-3	131-3	120-2	283-4	363-3	128-3	118-2	273-4	312-3	125-3
0.160	204-2	821-4	237-2	328-3	322-2	402-4	798-3	160-3	158-2	346-4	562-3	138-3	136-2	329-4	439-3	132-3	129-2	316-4	354-3	128-3
0.170	133-2	572-4	166-2	202-3	211-2	329-4	890-3	116-3	121-2	372-4	638-3	132-3	137-2	373-4	495-3	132-3	138-2	362-4	386-3	129-3
0.180	213-2	944-4	255-2	298-3	329-2	548-4	111-2	172-3	191-2	444-4	775-3	140-3	155-2	421-4	584-3	133-3	147-2	411-4	411-3	131-3
0.190	240-2	121-3	316-2	343-3	400-2	766-4	176-2	217-3	253-2	551-4	107-2	156-3	182-2	466-4	706-3	132-3	154-2	464-4	467-3	133-3
0.200	383-3	645-4	151-2	164-3	202-2	659-4	110-2	168-3	207-2	614-4	102-2	156-3	193-2	530-4	762-3	135-3	166-2	524-4	539-3	136-3
0.220	208-2	996-4	229-2	210-3	284-2	929-4	137-2	195-3	265-2	817-4	110-2	172-3	233-2	734-4	863-3	155-3	209-2	661-4	690-3	143-3
0.240	260-2	187-3	358-2	333-3	491-2	118-3	234-2	210-3	310-2	101-3	136-2	181-3	264-2	922-4	107-2	165-3	241-2	820-4	835-3	149-3
0.260	451-2	222-3	473-2	336-3	537-2	137-3	234-2	208-3	331-2	120-3	168-2	183-3	290-2	108-3	128-2	165-3	261-2	971-4	100-2	150-3
0.280	861-3	201-3	394-2	263-3	452-2	147-3	252-2	193-3	331-2	128-3	193-2	166-3	287-2	119-3	157-2	156-3	267-2	112-3	123-2	152-3
0.300	212-2	195-3	277-2	222-3	410-2	158-3	233-2	180-3	331-2	148-3	222-2	168-3	310-2	137-3	193-2	157-3	288-2	131-3	143-2	153-3
0.320	568-2	320-3	586-2	320-3	629-2	199-3	333-2	199-3	391-2	181-3	283-2	181-3	356-2	158-3	227-2	159-3	310-2	152-3	163-2	156-3
0.340	399-2	330-3	546-2	292-3	610-2	264-3	419-2	233-3	488-2	207-3	324-2	183-3	384-2	176-3	252-2	177-3	325-2	177-3	178-2	162-3
0.360	138-1	858-3	141-1	677-3	149-1	393-3	593-2	312-3	687-2	282-3	382-2	222-3	493-2	237-3	261-2	189-3	413-2	207-3	170-3	361-2
0.380	960-2	758-3	114-1	536-3	125-1	464-3	611-2	329-3	767-2	383-3	461-2	274-3	633-2	307-3	329-2	218-3	507-2	243-3	229-2	179-3
0.400	130-1	920-3	138-1	588-3	144-1	573-3	757-2	367-3	900-2	457-3	566-2	292-3	718-2	359-3	397-2	232-3	565-2	276-3	265-2	185-3
0.420	116-1	137-2	195-1	786-3	205-1	759-3	108-1	440-3	113-1	491-3	689-2	284-3	734-2	389-3	462-2	229-3	580-2	309-3	293-2	187-3
0.440	896-2	761-3	101-1	402-3	108-1	556-3	780-2	293-3	794-2	505-3	691-2	270-3	722-2	413-3	512-2	220-3	592-2	340-3	322-2	189-3
0.460	163-1	143-2	177-1	692-3	195-1	799-3	106-1	386-3	109-1	575-3	770-2	280-3	786-2	453-3	540-2	223-3	618-2	372-3	354-2	189-3
0.480	138-1	128-2	158-1	570-3	168-1	848-3	109-1	375-3	111-1	600-3	784-2	267-3	785-2	501-3	540-2	224-3	654-2	405-3	383-2	190-3
0.500	565-2	958-3	104-1	392-3	120-1	667-3	784-2	273-3	838-2	558-3	699-2	230-3	701-2	541-3	540-2	224-3	679-2	439-3	412-2	190-3
0.550	215-1	210-2	226-1	713-3	241-1	114-2	125-1	387-3	130-1	977-2	977-2	310-3	104-1	729-3	735-2	251-3	832-2	528-3	478-2	189-3
0.600	508-2	157-2	160-1	447-3	164-1	140-2	146-1	399-3	146-1	118-2	119-1	339-3	123-1	892-3	851-2	258-3	934-2	589-3	531-2	179-3
0.650	248-1	265-2	251-1	643-3	256-1	181-2	176-1	440-3	175-1	131-2	123-1	320-3	127-1	916-3	836-2	226-3	886-2	606-3	529-2	157-3
0.700	186-1	245-2	206-1	513-3	220-1	176-2	137-1	369-3	158-1	118-2	960-2	248-3	106-1	796-3	684-2	169-3	714-2	658-3	493-2	145-3

IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP N52W

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT																	
0.75	140-1	231-2	167-1	420-3	193-1	149-2	111-1	272-3	125-1	113-2	842-2	207-3	949-2	870-3	681-2	161-3	729-2
0.80	121-1	205-2	147-1	328-3	161-1	120-2	105-1	191-3	943-2	110-2	857-2	177-3	869-2	100-2	726-2	163-3	786-2
0.85	886-2	214-2	142-1	303-3	158-1	161-2	118-1	228-3	119-1	135-2	956-2	192-3	998-2	113-2	754-2	163-3	836-2
0.90	172-1	343-2	219-1	433-3	239-1	216-2	143-1	274-3	151-1	138-2	951-2	175-3	965-2	118-2	764-2	152-3	825-2
0.95	289-1	465-2	301-1	527-3	307-1	244-2	132-1	276-3	161-1	166-2	108-1	189-3	110-1	127-2	863-2	147-3	844-2
1.00	920-2	317-2	194-1	325-3	199-1	236-2	133-1	241-3	148-1	181-2	112-1	186-3	113-1	148-2	920-2	154-3	929-2
1.10	298-1	551-2	306-1	466-3	315-1	373-2	209-1	315-3	213-1	268-2	145-1	228-3	153-1	209-2	986-2	180-3	119-1
1.20	432-1	861-2	445-1	611-3	450-1	477-2	229-1	339-3	250-1	388-2	177-1	277-3	203-1	291-2	140-1	211-3	152-1
1.30	469-1	103-1	486-1	629-3	502-1	565-2	270-1	342-3	273-1	456-2	225-1	277-3	220-1	335-2	175-1	207-3	162-1
1.40	583-2	718-2	302-1	374-3	322-1	588-2	268-1	307-3	264-1	468-2	229-1	245-3	210-1	346-2	182-1	183-3	155-1
1.50	532-1	130-1	532-1	591-3	545-1	693-2	272-1	315-3	290-1	473-2	203-1	215-3	198-1	344-2	168-1	159-3	144-1
1.60	276-1	122-1	459-1	489-3	480-1	902-2	323-1	360-3	354-1	615-2	210-1	246-3	241-1	401-2	148-1	162-3	157-1
1.70	354-1	136-1	458-1	483-3	504-1	995-2	333-1	352-3	368-1	669-2	246-1	237-3	247-1	480-2	170-1	172-3	177-1
1.80	477-1	137-1	477-1	433-3	478-1	100-1	322-1	318-3	352-1	710-2	256-1	225-3	248-1	525-2	182-1	169-3	183-1
1.90	486-1	147-1	486-1	416-3	486-1	961-2	299-1	272-3	317-1	715-2	243-1	203-3	236-1	542-2	180-1	156-3	179-1
2.00	172-1	118-1	358-1	303-3	372-1	845-2	264-1	216-3	265-1	691-2	215-1	177-3	217-1	531-2	163-1	139-3	167-1
2.20	100-1	946-2	226-1	199-3	270-1	784-2	198-1	165-3	224-1	612-2	168-1	129-3	174-1	511-2	133-1	108-3	145-1
2.40	294-1	152-1	380-1	270-3	398-1	113-1	275-1	202-3	297-1	826-2	190-1	147-3	216-1	722-2	160-1	129-3	189-1
2.60	407-1	125-1	540-1	340-3	544-1	152-1	331-1	230-3	367-1	115-1	246-1	175-3	279-1	980-2	208-1	149-3	236-1
2.80	303-1	175-1	364-1	229-3	394-1	149-1	304-1	194-3	334-1	131-1	284-1	171-3	294-1	121-1	247-1	160-3	273-1
3.00	203-1	183-1	383-1	208-3	384-1	172-1	363-1	195-3	360-1	163-1	332-1	186-3	343-1	149-1	283-1	171-3	312-1
3.20	388-1	253-1	497-1	253-3	498-1	227-1	449-1	227-3	447-1	206-1	390-1	207-3	405-1	179-1	318-1	182-3	352-1
3.40	506-1	320-1	568-1	283-3	591-1	277-1	504-1	245-3	513-1	245-1	430-1	218-3	453-1	208-1	340-1	187-3	384-1
3.60	445-1	368-1	587-1	290-3	642-1	321-1	525-1	253-3	561-1	272-1	449-1	215-3	475-1	230-1	356-1	185-3	402-1
3.80	381-1	395-1	567-1	280-3	653-1	350-1	513-1	248-3	579-1	295-1	444-1	209-3	488-1	247-1	357-1	179-3	409-1
4.00	557-1	429-1	629-1	274-3	675-1	372-1	519-1	238-3	584-1	318-1	440-1	204-3	500-1	261-1	353-1	170-3	410-1
4.20	744-1	498-1	745-1	289-3	745-1	433-1	590-1	251-3	649-1	355-1	467-1	207-3	532-1	273-1	379-1	162-3	409-1
4.40	524-1	566-1	777-1	299-3	809-1	496-1	656-1	262-3	708-1	409-1	515-1	217-3	585-1	305-1	401-1	164-3	436-1
4.60	687-1	659-1	871-1	318-3	901-1	555-1	715-1	268-3	758-1	458-1	572-1	222-3	625-1	340-1	440-1	167-3	465-1
4.80	732-1	805-1	103 0	357-3	105 0	642-1	802-1	285-3	841-1	500-1	628-1	223-3	654-1	370-1	484-1	167-3	485-1
5.00	889-1	946-1	116 0	387-3	118 0	741-1	889-1	303-3	932-1	556-1	665-1	228-3	698-1	394-1	511-1	164-3	496-1
5.50	193 0	169 0	193 0	573-3	193 0	981-1	112 0	332-3	112 0	641-1	733-1	217-3	732-1	436-1	509-1	150-3	499-1
6.00	986-1	105 0	115 0	300-3	110 0	802-1	890-1	228-3	840-1	582-1	645-1	166-3	610-1	416-1	483-1	121-3	436-1
6.50	358-1	646-1	661-1	156-3	624-1	557-1	586-1	135-3	538-1	471-1	501-1	114-3	455-1	378-1	413-1	942-4	365-1
7.00	290-1	450-1	493-1	939-4	404-1	419-1	468-1	877-4	376-1	381-1	432-1	803-4	342-1	330-1	379-1	714-4	296-1
7.50	503-2	349-1	392-1	634-4	292-1	331-1	381-1	604-4	278-1	309-1	365-1	567-4	259-1	279-1	336-1	529-4	233-1
8.00	676-2	303-1	317-1	484-4	237-1	292-1	312-1	468-4	229-1	278-1	309-1	450-4	218-1	256-1	297-1	430-4	201-1

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

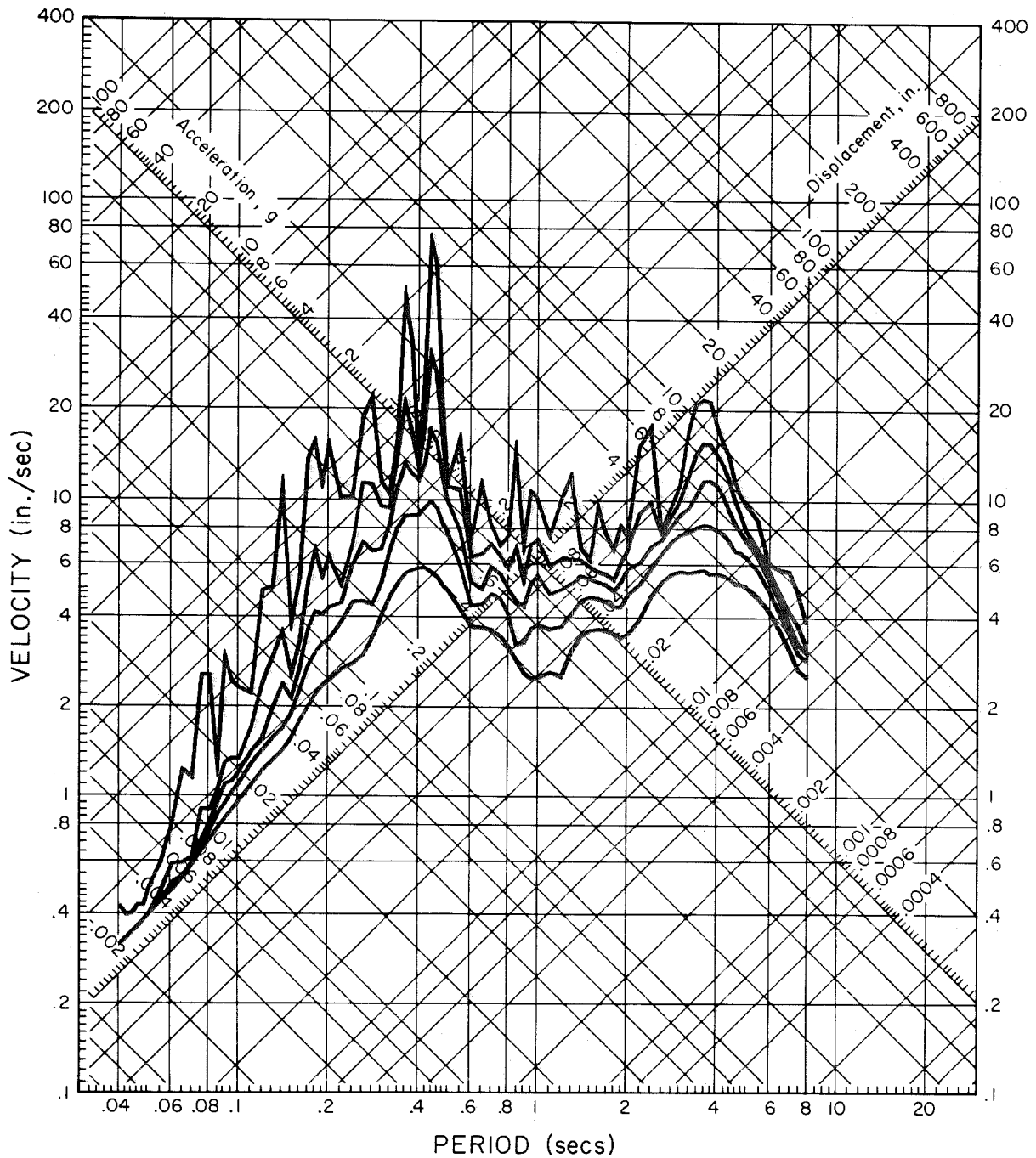


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG113 71.040.0 611 WEST SIXTH STREET, 42ND FLOOR, LOS ANGELES, CAL. COMP DOWN

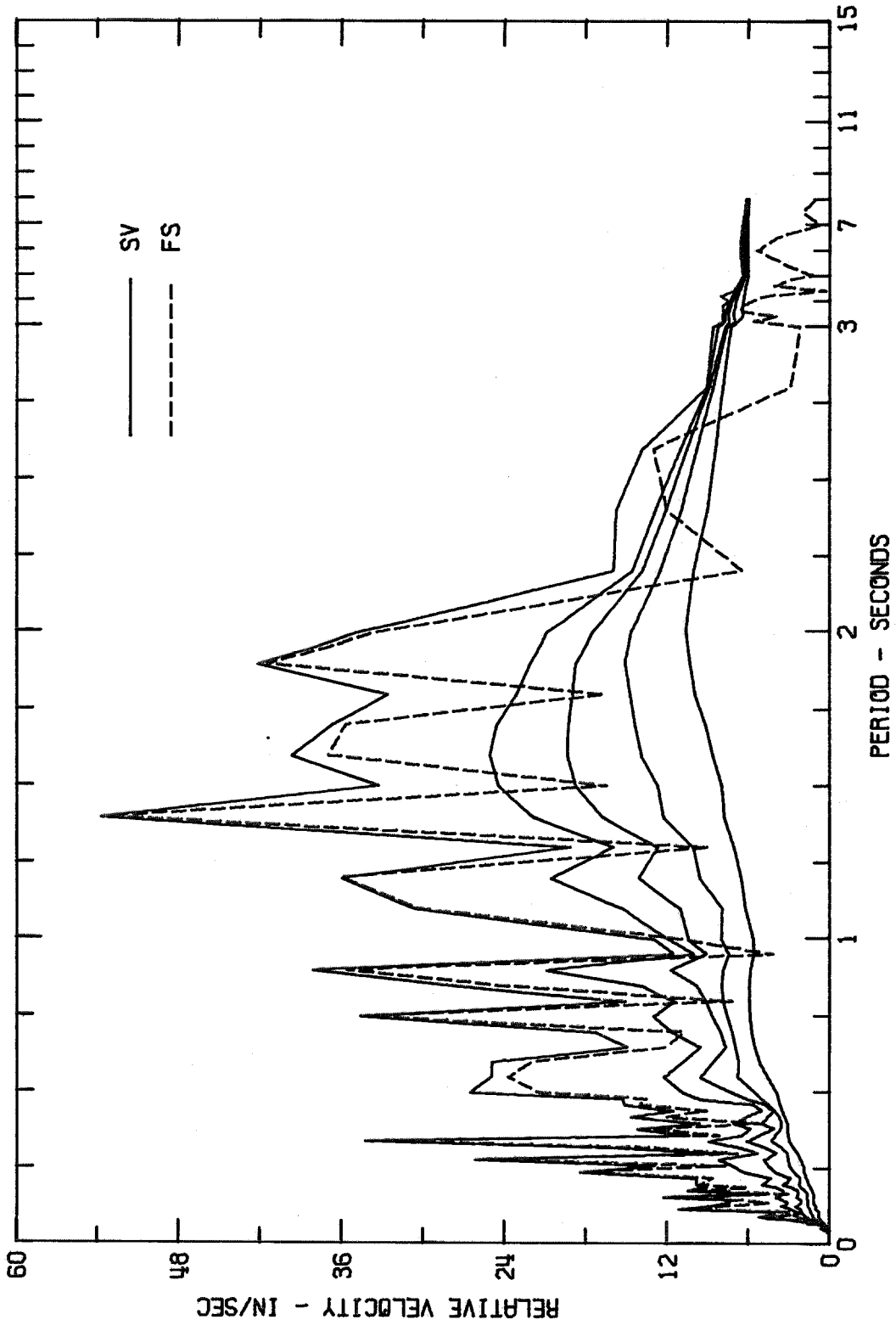
THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT			
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA
0.040	114-3	273-5	203-3	175-3	430-3	205-5	721-4	131-3	323-3	205-5	647-4	131-3	322-3	205-5	646-4	131-3	322-3	205-5	658-4	131-3
0.042	115-3	270-5	142-3	157-3	405-3	226-5	781-4	131-3	338-3	226-5	716-4	131-3	338-3	226-5	721-4	131-3	339-3	226-5	728-4	131-3
0.044	108-3	286-5	142-3	151-3	408-3	248-5	911-4	131-3	355-3	248-5	819-4	131-3	354-3	248-5	809-4	131-3	355-3	249-5	805-4	131-3
0.046	124-3	319-5	147-3	154-3	436-3	269-5	986-4	130-3	368-3	270-5	926-4	130-3	369-3	272-5	904-4	131-3	371-3	272-5	888-4	132-3
0.048	135-3	333-5	151-3	148-3	436-3	298-5	115-3	132-3	390-3	297-5	103-3	130-3	389-3	297-5	100-3	131-3	389-3	297-5	974-4	132-3
0.050	151-3	394-5	225-3	161-3	496-3	323-5	146-3	132-3	406-3	324-5	118-3	132-3	407-3	324-5	109-3	132-3	407-3	323-5	106-3	132-3
0.055	231-3	530-5	303-3	179-3	605-3	426-5	212-3	144-3	486-3	396-5	166-3	134-3	453-3	394-5	143-3	133-3	450-3	394-5	130-3	133-3
0.060	483-3	788-5	505-3	224-3	825-3	571-5	267-3	162-3	598-3	494-5	208-3	140-3	517-3	468-5	185-3	133-3	490-3	472-5	156-3	134-3
0.065	732-3	129-4	960-3	312-3	124-2	622-5	280-3	151-3	603-3	565-5	258-3	137-3	546-3	555-5	231-3	134-3	537-3	560-5	191-3	136-3
0.070	741-3	131-4	890-3	273-3	117-2	706-5	419-3	147-3	633-3	674-5	338-3	140-3	605-3	665-5	278-3	139-3	597-3	664-5	229-3	139-3
0.075	236-2	310-4	238-2	564-3	260-2	109-4	583-3	199-3	918-3	857-5	367-3	155-3	718-3	812-5	329-3	148-3	680-3	786-5	274-3	144-3
0.080	200-2	331-4	226-2	528-3	259-2	116-4	670-3	186-3	913-3	105-4	454-3	168-3	828-3	991-5	382-3	159-3	778-3	923-5	314-3	148-3
0.085	109-2	175-4	122-2	248-3	129-2	143-4	684-3	203-3	106-2	130-4	525-3	184-3	963-3	118-4	438-3	168-3	877-3	107-4	364-3	153-3
0.090	118-2	432-4	269-2	545-3	301-2	189-4	100-2	239-3	132-2	159-4	644-3	201-3	111-2	137-4	516-3	174-3	960-3	122-4	408-3	156-3
0.095	141-2	374-4	192-2	423-3	247-2	206-4	884-3	233-3	136-2	172-4	710-3	195-3	113-2	158-4	599-3	180-3	104-2	137-4	450-3	159-3
0.100	123-2	375-4	178-2	384-3	235-2	217-4	122-2	221-3	136-2	195-4	889-3	202-3	122-2	178-4	688-3	186-3	111-2	156-4	494-3	164-3
0.110	395-3	394-4	457-2	682-3	502-2	466-4	219-2	333-3	244-2	304-4	150-2	216-3	159-2	278-4	102-2	199-3	145-2	237-4	718-3	174-3
0.120	404-2	960-4	461-2	644-3	514-2	623-4	243-2	376-3	301-2	416-4	175-2	255-3	201-2	331-4	117-2	202-3	160-2	270-4	870-3	174-3
0.130	291-2	106-3	116-1	132-2	113-1	812-4	298-2	425-3	364-2	541-4	188-2	283-3	243-2	382-4	135-2	202-3	171-2	323-4	105-2	176-3
0.140	115-1	253-3	116-1	132-2	113-1	812-4	298-2	425-3	364-2	541-4	188-2	283-3	243-2	382-4	135-2	202-3	171-2	323-4	105-2	176-3
0.150	222-2	924-4	372-2	420-3	387-2	623-4	227-2	284-3	261-2	518-4	181-2	236-3	217-2	463-4	152-2	210-3	194-2	384-4	127-2	183-3
0.160	322-2	140-3	494-2	563-3	553-2	862-4	277-2	345-3	338-2	696-4	231-2	279-3	273-2	593-4	185-2	241-3	233-2	468-4	150-2	197-3
0.170	139-1	385-3	140-1	136-2	142-1	145-3	501-2	513-3	537-2	100-3	332-2	354-3	370-2	755-4	229-2	268-3	279-2	549-4	177-2	205-3
0.180	998-2	465-3	156-1	146-2	162-1	199-3	647-2	631-3	695-2	121-3	388-2	389-3	425-2	891-4	267-2	286-3	311-2	642-4	200-2	215-3
0.190	107-1	350-3	115-1	994-3	116-1	168-3	500-2	480-3	558-2	125-3	361-2	355-3	415-2	100-3	289-2	291-3	332-2	723-4	220-2	216-3
0.200	131-1	503-3	156-1	128-2	158-1	209-3	657-2	541-3	658-2	139-3	427-2	367-3	438-2	109-3	318-2	292-3	343-2	790-4	241-2	220-3
0.220	861-2	364-3	102-1	769-3	104-1	183-3	516-2	390-3	523-2	159-3	417-2	335-3	456-2	138-3	356-2	294-3	394-2	953-4	267-2	211-3
0.240	789-2	400-3	103-1	711-3	104-1	276-3	711-2	494-3	724-2	234-3	586-2	414-3	614-2	175-3	459-2	310-3	459-2	108-3	301-2	206-3
0.260	135-1	796-3	187-1	120-2	192-1	484-3	115-1	728-3	117-1	303-3	739-2	464-3	733-2	191-3	493-2	288-3	461-2	125-3	295-2	198-3
0.280	164-1	101-2	216-1	131-2	226-1	514-3	110-1	669-3	115-1	304-3	654-2	396-3	683-2	200-3	445-2	263-3	450-2	156-3	304-2	212-3
0.300	104-1	562-3	113-1	639-3	117-1	465-3	853-2	531-3	974-2	333-3	637-2	383-3	697-2	256-3	449-2	294-3	537-2	198-3	328-2	235-3
0.320	818-2	541-3	977-2	541-3	106-1	489-3	874-2	490-3	961-2	434-3	770-2	437-3	853-2	352-3	586-2	352-3	691-2	245-3	404-2	258-3
0.340	914-2	891-3	152-1	788-3	164-1	781-3	133-1	689-3	144-1	613-3	107-1	548-3	113-1	447-3	749-2	398-3	826-2	288-3	466-2	271-3
0.360	436-1	284-2	502-1	224-2	497-1	123-2	209-1	980-3	216-1	780-3	128-1	623-3	136-1	517-3	853-2	416-3	902-2	329-3	516-2	277-3
0.380	252-1	207-2	343-1	147-2	343-1	103-2	171-1	734-3	170-1	758-3	121-1	541-3	125-1	547-3	869-2	396-3	905-2	357-3	557-2	270-3
0.400	871-2	900-3	137-1	575-3	141-1	842-3	133-1	541-3	132-1	761-3	116-1	493-3	119-1	580-3	891-2	375-3	912-2	382-3	589-2	263-3
0.420	838-2	182-2	265-1	105-2	272-1	123-2	181-1	710-3	184-1	922-3	135-1	540-3	137-1	648-3	983-2	381-3	969-2	401-3	621-2	251-3
0.440	677-1	531-2	756-1	280-2	759-1	220-2	323-1	117-2	315-1	122-2	177-1	647-3	174-1	708-3	106-1	385-3	101-1	407-3	634-2	231-3
0.460	582-1	458-2	627-1	221-2	626-1	197-2	286-1	961-3	270-1	117-2	172-1	566-3	160-1	700-3	106-1	347-3	956-2	410-3	642-2	216-3
0.480	865-2	176-2	239-1	783-3	231-1	130-2	177-1	579-3	170-1	948-3	128-1	426-3	124-1	654-3	959-2	295-3	856-2	401-3	615-2	199-3
0.500	987-2	927-3	123-1	379-3	116-1	904-3	122-1	371-3	113-1	812-3	108-1	337-3	102-1	633-3	870-2	265-3	795-2	400-3	610-2	182-3
0.550	125-1	145-2	183-1	492-3	166-1	971-3	122-1	328-3	111-1	706-3	924-2	240-3	807-2	541-3	732-2	187-3	618-2	380-3	545-2	144-3
0.600	647-2	711-3	939-2	202-3	744-2	622-3	828-2	176-3	652-2	513-3	696-2	145-3	537-2	425-3	611-2	123-3	445-2	362-3	490-2	112-3
0.650	830-2	120-2	115-1	292-3	116-1	692-3	751-2	168-3	669-2	526-3	598-2	128-3	508-2	466-3	522-2	115-3	451-2	389-3	452-2	103-3
0.700	337-2	940-3	948-2	196-3	844-2	806-3	806-2	168-3	723-2	674-3	671-2	140-3	605-2	545-3	533-2	117-3	489-2	413-3	431-2	959-4

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	226-2	854-3	739-2	155-3	716-2	786-3	689-2	142-3	658-2	687-3	614-2	126-3	575-2	562-3	521-2	105-3	471-2	421-3	422-2	863-4	353-2
0.80	550-2	992-3	857-2	158-3	779-2	762-3	709-2	121-3	598-2	645-3	614-2	104-3	507-2	527-3	517-2	868-4	414-2	413-3	410-2	752-4	324-2
0.85	132-1	203-2	149-1	287-3	150-1	959-3	735-2	135-3	709-2	625-3	553-2	899-4	462-2	447-3	466-2	665-4	330-2	394-3	395-2	649-4	291-2
0.90	312-2	102-2	850-2	129-3	715-2	775-3	657-2	980-4	541-2	633-3	545-2	803-4	442-2	478-3	454-2	618-4	333-2	380-3	382-2	566-4	265-2
0.95	805-2	166-2	112-1	188-3	109-1	108-2	736-2	123-3	718-2	802-3	530-2	915-4	530-2	565-3	440-2	656-4	374-2	384-3	381-2	516-4	254-2
1.00	101-1	165-2	107-1	169-3	104-1	119-2	750-2	122-3	753-2	905-3	568-2	930-4	568-2	612-3	490-2	641-4	384-2	406-3	399-2	494-4	255-2
1.10	359-2	135-2	852-2	114-3	771-2	107-2	689-2	909-4	613-2	858-3	619-2	731-4	490-2	652-3	534-2	573-4	372-2	466-3	427-2	473-4	266-2
1.20	402-2	196-2	102-1	139-3	102-1	123-2	768-2	874-4	644-2	970-3	658-2	694-4	508-2	725-3	545-2	534-4	379-2	494-3	439-2	418-4	259-2
1.30	110-1	257-2	120-1	155-3	124-1	132-2	788-2	803-4	641-2	110-2	645-2	671-4	532-2	870-3	557-2	542-4	420-2	655-3	451-2	442-4	316-2
1.40	173-2	156-2	693-2	815-4	701-2	142-2	642-2	744-4	640-2	125-2	574-2	658-4	563-2	104-2	511-2	554-4	467-2	788-3	442-2	449-4	353-2
1.50	416-2	152-2	571-2	695-4	640-2	144-2	530-2	656-4	605-2	132-2	485-2	604-4	552-2	114-2	461-2	533-4	477-2	884-3	421-2	439-4	370-2
1.60	950-2	248-2	974-2	992-4	975-2	149-2	575-2	595-4	585-2	137-2	520-2	551-4	539-2	120-2	467-2	495-4	472-2	951-3	420-2	422-4	373-2
1.70	742-2	212-2	788-2	753-4	786-2	155-2	594-2	550-4	573-2	142-2	544-2	508-4	526-2	124-2	492-2	452-4	461-2	999-3	439-2	399-4	369-2
1.80	684-2	198-2	709-2	627-4	693-2	157-2	615-2	496-4	548-2	143-2	559-2	458-4	502-2	126-2	505-2	412-4	443-2	103-2	472-2	370-4	361-2
1.90	754-2	255-2	865-2	722-4	843-2	190-2	719-2	540-4	629-2	164-2	657-2	468-4	542-2	133-2	590-2	391-4	443-2	105-2	510-2	341-4	349-2
2.00	399-2	245-2	981-2	627-4	771-2	220-2	888-2	564-4	692-2	190-2	784-2	490-4	599-2	155-2	669-2	409-4	489-2	114-2	543-2	341-4	360-2
2.20	139-1	548-2	155-1	115-3	156-1	324-2	940-2	686-4	927-2	220-2	834-2	466-4	629-2	185-2	721-2	396-4	530-2	141-2	573-2	336-4	405-2
2.40	179-1	689-2	179-1	122-3	180-1	386-2	109-1	687-4	101-2	272-2	876-2	486-4	713-2	229-2	760-2	414-4	600-2	184-2	599-2	351-4	483-2
2.60	662-2	338-2	105-1	512-4	818-2	328-2	101-1	497-4	793-2	310-2	937-2	473-4	750-2	278-2	823-2	435-4	674-2	222-2	646-2	372-4	537-2
2.80	748-2	436-2	113-1	568-4	978-2	401-2	106-1	524-4	901-2	373-2	969-2	492-4	837-2	329-2	840-2	447-4	738-2	255-2	655-2	380-4	573-2
3.00	292-2	554-2	120-1	629-4	116-1	492-2	110-1	560-4	103-1	438-2	984-2	504-4	917-2	374-2	816-2	447-4	784-2	280-2	647-2	376-4	588-2
3.20	164-1	884-2	175-1	882-4	173-1	626-2	124-1	626-4	123-1	491-2	107-1	492-4	965-2	406-2	880-2	429-4	798-2	295-2	680-2	359-4	580-2
3.40	210-1	114-1	212-1	101-3	212-1	793-2	157-1	702-4	146-1	579-2	110-1	514-4	107-1	449-2	881-2	411-4	830-2	318-2	694-2	333-4	587-2
3.60	192-1	126-1	220-1	999-4	220-1	913-2	167-1	721-4	159-1	683-2	123-1	543-4	119-1	486-2	935-2	404-4	848-2	340-2	692-2	314-4	594-2
3.80	204-1	131-1	217-1	932-4	217-1	956-2	170-1	678-4	158-1	723-2	133-1	515-4	119-1	507-2	985-2	376-4	839-2	348-2	755-2	301-4	576-2
4.00	183-1	117-1	197-1	747-4	183-1	936-2	165-1	598-4	147-1	735-2	128-1	472-4	115-1	515-2	103-1	343-4	810-2	366-2	799-2	280-4	575-2
4.20	955-2	107-1	177-1	623-4	160-1	903-2	153-1	523-4	135-1	709-2	125-1	413-4	106-1	528-2	104-1	323-4	790-2	380-2	822-2	267-4	568-2
4.40	144-1	101-1	165-1	535-4	144-1	839-2	146-1	443-4	119-1	659-2	123-1	350-4	941-2	518-2	103-1	293-4	740-2	388-2	828-2	254-4	554-2
4.60	113-1	872-2	137-1	421-4	119-1	751-2	125-1	363-4	102-1	629-2	111-1	307-4	860-2	504-2	100-1	258-4	689-2	391-2	820-2	239-4	535-2
4.80	702-2	816-2	127-1	362-4	106-1	701-2	119-1	311-4	918-2	610-2	108-1	275-4	799-2	518-2	954-2	240-4	679-2	405-2	802-2	223-4	531-2
5.00	954-2	793-2	121-1	324-4	996-2	648-2	114-1	265-4	815-2	596-2	106-1	249-4	749-2	525-2	930-2	226-4	659-2	415-2	784-2	208-4	522-2
5.50	782-2	767-2	105-1	259-4	876-2	611-2	997-2	207-4	698-2	571-2	932-2	199-4	653-2	514-2	881-2	189-4	587-2	421-2	791-2	171-4	481-2
6.00	347-2	593-2	983-2	168-4	621-2	563-2	953-2	160-4	590-2	524-2	909-2	153-4	549-2	480-2	849-2	153-4	502-2	408-2	781-2	148-4	427-2
6.50	569-2	616-2	943-2	149-4	595-2	515-2	920-2	125-4	497-2	484-2	887-2	118-4	468-2	438-2	833-2	122-4	424-2	384-2	762-2	127-4	371-2
7.00	506-2	651-2	896-2	136-4	584-2	476-2	880-2	995-5	477-2	437-2	855-2	931-5	393-2	404-2	814-2	971-5	363-2	739-2	728-2	108-4	319-2
7.50	403-2	594-2	849-2	103-4	498-2	458-2	838-2	835-5	384-2	396-2	821-2	754-5	332-2	369-2	791-2	778-5	309-2	326-2	728-2	928-5	279-2
8.00	302-2	500-2	807-2	800-5	393-2	416-2	800-2	670-5	327-2	398-2	788-2	671-5	312-2	373-2	766-2	672-5	293-2	259-2	718-2	818-5	253-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S60E
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

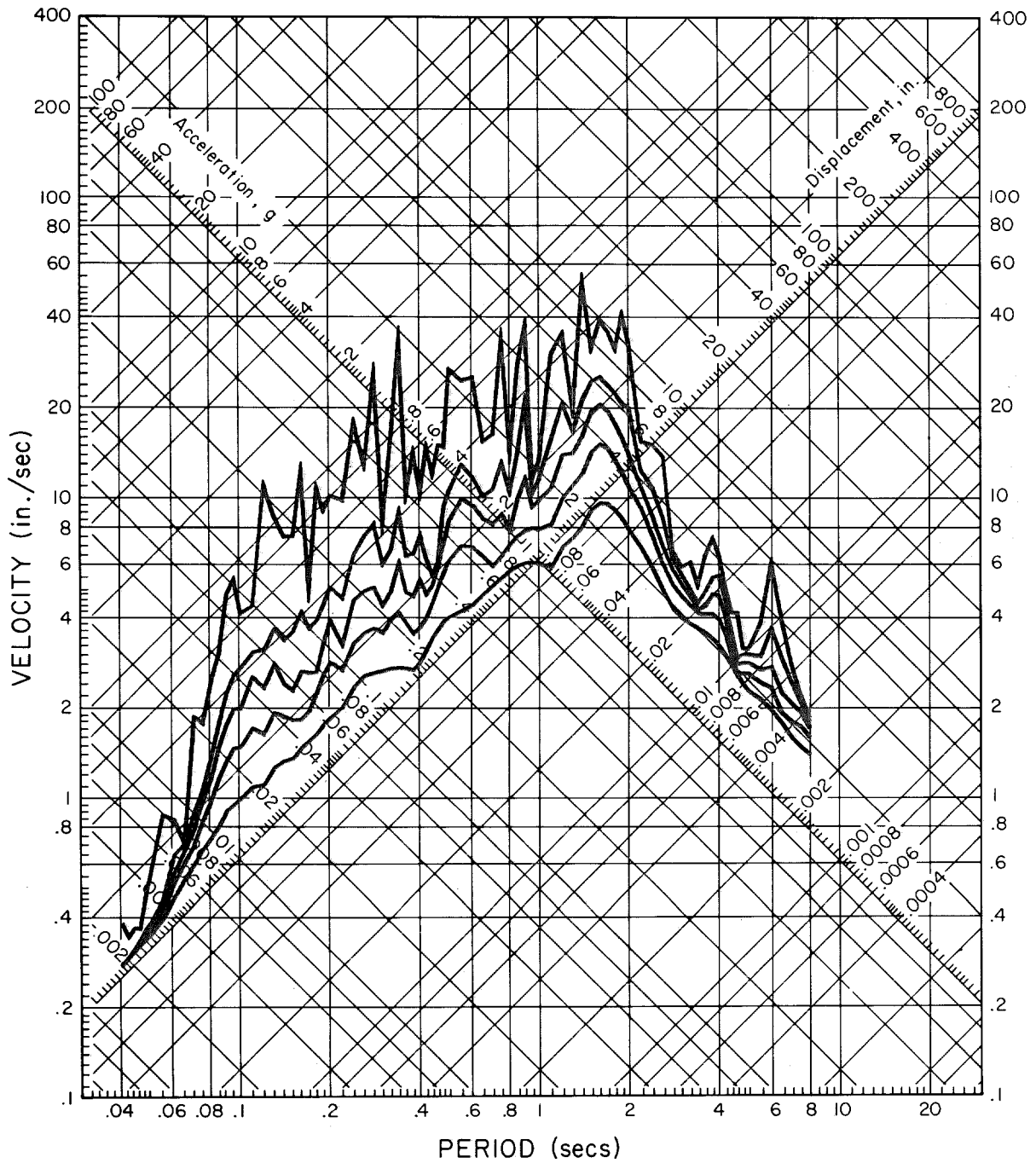


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S60E

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S60E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

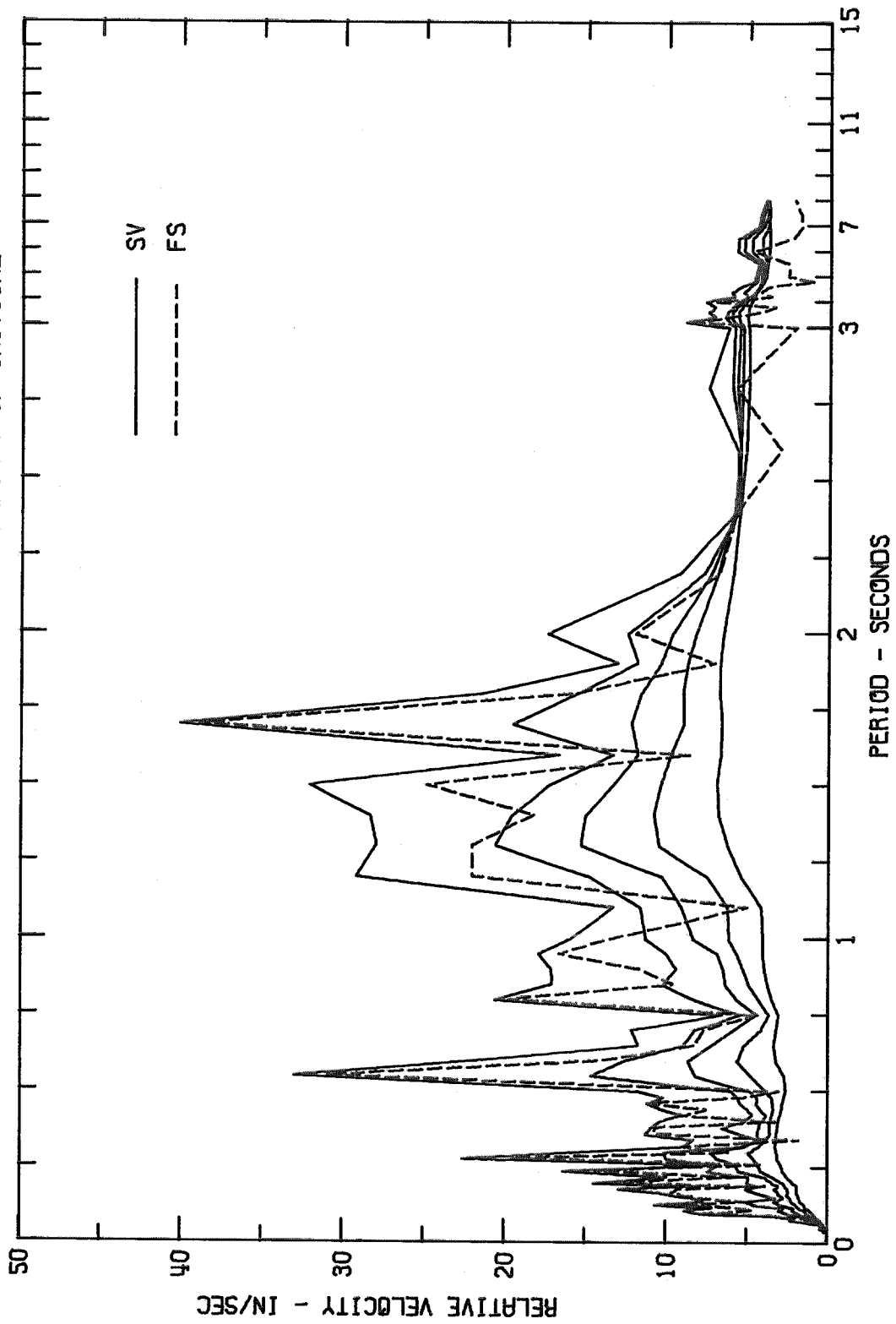
DAMPING = 0 PER CENT					DAMPING = 2 PER CENT					DAMPING = 5 PER CENT					DAMPING = 10 PER CENT					DAMPING = 20 PER CENT										
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	
0.040	125-3	244-5	167-3	156-3	384-3	179-5	983-4	114-3	282-3	177-5	929-4	113-3	278-3	177-5	916-4	113-3	279-3	178-5	887-4	114-3	280-3	178-5	887-4	114-3	280-3	178-5	887-4	114-3	280-3	178-5
0.042	119-4	232-5	143-3	134-3	348-3	198-5	109-3	115-3	297-3	197-5	103-3	114-3	296-3	197-5	100-3	114-3	295-3	197-5	980-4	114-3	295-3	197-5	980-4	114-3	295-3	197-5	980-4	114-3	295-3	197-5
0.044	589-4	261-5	163-3	138-3	373-3	221-5	111-3	117-3	316-3	219-5	111-3	116-3	313-3	219-5	110-3	115-3	312-3	217-5	107-3	115-3	310-3	217-5	107-3	115-3	310-3	217-5	107-3	115-3	310-3	217-5
0.046	567-4	271-5	181-3	131-3	370-3	248-5	120-3	120-3	339-3	244-5	119-3	118-3	334-3	241-5	120-3	117-3	330-3	238-5	118-3	115-3	325-3	238-5	118-3	115-3	325-3	238-5	118-3	115-3	325-3	238-5
0.048	115-3	357-5	227-3	158-3	468-3	282-5	134-3	125-3	369-3	273-5	134-3	121-3	357-3	266-5	131-3	118-3	348-3	260-5	130-3	115-3	340-3	260-5	130-3	115-3	340-3	260-5	130-3	115-3	340-3	260-5
0.050	353-3	452-5	429-3	185-3	568-3	311-5	175-3	127-3	391-3	299-5	150-3	122-3	375-3	289-5	145-3	118-3	364-3	282-5	144-3	116-3	355-3	282-5	144-3	116-3	355-3	282-5	144-3	116-3	355-3	282-5
0.055	435-3	771-5	708-3	260-3	880-3	407-5	267-3	138-3	465-3	384-5	209-3	130-3	438-3	368-5	196-3	125-3	420-3	352-5	184-3	121-3	402-3	352-5	184-3	121-3	402-3	352-5	184-3	121-3	402-3	352-5
0.060	319-3	814-5	549-3	231-3	852-3	623-5	347-3	176-3	652-3	540-5	296-3	154-3	674-3	565-3	265-3	141-3	615-3	559-5	299-3	130-3	605-3	559-5	299-3	130-3	605-3	559-5	299-3	130-3	605-3	559-5
0.065	435-3	732-5	468-3	177-3	708-3	733-5	425-3	178-3	709-3	698-5	389-3	170-3	674-3	636-5	337-3	156-3	623-3	549-5	234-3	470-3	732-5	468-3	177-3	708-3	732-5	468-3	177-3	708-3	732-5	468-3
0.070	109-2	210-4	164-2	439-3	188-2	100-4	587-3	210-3	900-3	885-5	499-3	185-3	795-3	782-5	453-3	165-3	702-3	674-5	379-3	605-3	885-5	499-3	185-3	795-3	782-5	453-3	165-3	702-3	674-5	379-3
0.075	110-2	214-4	160-2	389-3	179-2	130-4	888-3	236-3	108-2	118-4	762-3	215-3	995-3	101-4	630-3	187-3	849-3	811-5	468-3	679-3	118-4	762-3	215-3	995-3	101-4	630-3	187-3	849-3	811-5	468-3
0.080	233-2	318-4	239-2	508-3	250-2	177-4	121-2	284-3	139-2	150-4	103-2	242-3	118-2	126-4	809-3	200-3	989-3	949-5	571-3	745-3	250-2	177-4	121-2	284-3	139-2	150-4	103-2	242-3	118-2	126-4
0.085	234-2	417-4	290-2	590-3	308-2	243-4	154-2	346-3	180-2	202-4	129-2	292-3	149-2	160-4	100-2	228-3	118-2	110-4	657-3	815-3	308-2	243-4	154-2	346-3	180-2	202-4	129-2	292-3	149-2	160-4
0.090	350-2	702-4	463-2	887-3	490-2	325-4	203-2	411-3	227-2	256-4	153-2	327-3	179-2	192-4	116-2	250-3	134-2	130-4	755-3	909-3	490-2	325-4	203-2	411-3	227-2	256-4	153-2	327-3	179-2	192-4
0.095	513-2	830-4	525-2	940-3	443-2	540-4	255-2	458-3	309-2	448-4	174-2	345-3	200-2	223-4	125-2	258-3	147-2	144-4	801-3	954-3	540-4	255-2	458-3	309-2	448-4	174-2	345-3	200-2	223-4	125-2
0.100	261-2	666-4	407-2	681-3	418-2	437-4	269-2	452-3	274-2	319-4	186-2	335-3	200-2	236-4	131-2	252-3	148-2	160-4	831-3	100-2	681-3	418-2	437-4	269-2	452-3	274-2	319-4	186-2	335-3	200-2
0.110	203-2	777-4	409-2	656-3	443-2	765-4	357-2	461-3	370-2	583-4	254-2	349-3	282-2	403-4	161-2	243-3	194-2	264-4	107-2	127-2	777-4	409-2	656-3	443-2	765-4	357-2	461-3	370-2	583-4	254-2
0.120	107-1	215-3	111-1	152-2	112-1	602-4	284-2	431-3	315-2	450-4	211-2	316-3	235-2	314-4	145-2	226-3	164-2	213-4	158-3	111-2	602-4	284-2	431-3	315-2	450-4	211-2	316-3	235-2	314-4	145-2
0.130	776-2	181-3	867-2	110-2	879-2	765-4	357-2	461-3	370-2	583-4	254-2	349-3	282-2	403-4	161-2	243-3	194-2	264-4	107-2	127-2	776-2	181-3	867-2	110-2	879-2	765-4	357-2	461-3	370-2	583-4
0.140	454-2	169-3	740-2	884-3	760-2	755-4	308-2	394-3	339-2	540-4	215-2	249-3	242-2	422-4	164-2	220-3	189-2	298-4	116-2	166-3	740-2	884-3	760-2	755-4	308-2	394-3	339-2	540-4	215-2	249-3
0.150	658-2	182-3	728-2	829-3	764-2	869-4	348-2	396-3	364-2	551-4	215-2	249-3	242-2	422-4	164-2	220-3	189-2	298-4	116-2	166-3	829-3	764-2	869-4	348-2	396-3	364-2	551-4	215-2	249-3	242-2
0.160	117-1	318-3	123-1	127-2	125-1	108-3	397-2	431-3	425-2	675-4	244-2	271-3	265-2	470-4	171-2	189-3	184-2	376-4	119-2	154-3	127-1	318-3	123-1	127-2	125-1	108-3	397-2	431-3	425-2	675-4
0.170	285-2	135-3	469-2	481-3	502-2	110-3	342-2	354-3	372-2	711-4	236-2	256-3	263-2	647-4	180-2	223-3	225-2	474-4	128-2	167-3	469-2	481-3	502-2	110-3	342-2	354-3	372-2	711-4	236-2	
0.180	102-1	315-3	105-1	996-3	110-1	113-3	400-2	384-3	449-2	996-4	286-2	281-3	329-2	783-4	210-2	223-3	259-2	538-4	142-2	150-3	102-1	315-3	105-1	996-3	110-1	113-3	400-2	384-3	449-2	996-4
0.190	599-2	278-3	904-2	789-3	921-2	135-3	400-2	384-3	449-2	996-4	286-2	281-3	329-2	783-4	210-2	223-3	259-2	538-4	142-2	150-3	599-2	278-3	904-2	789-3	921-2	135-3	400-2	384-3	449-2	996-4
0.200	966-2	328-3	984-2	838-3	103-1	163-3	501-2	422-3	513-2	126-3	347-2	322-3	398-2	908-4	226-2	233-3	285-2	595-4	155-2	156-3	966-2	328-3	984-2	838-3	103-1	163-3	501-2	422-3	513-2	126-3
0.220	864-2	348-3	984-2	737-3	996-2	164-3	432-2	348-3	470-2	114-3	291-2	240-3	326-2	941-4	220-2	199-3	268-2	709-4	169-2	156-3	864-2	348-3	984-2	737-3	996-2	164-3	432-2	348-3	470-2	114-3
0.240	184-1	697-3	182-1	123-2	182-1	254-3	633-2	449-3	665-2	177-3	397-2	316-3	464-2	126-3	259-2	231-3	330-2	904-4	187-2	171-3	184-1	697-3	182-1	123-2	182-1	254-3	633-2	449-3	665-2	177-3
0.260	772-2	539-3	128-1	815-3	130-1	316-3	722-2	477-3	765-2	205-3	450-2	313-3	497-2	148-3	297-2	230-3	358-2	106-3	195-2	168-3	772-2	539-3	128-1	815-3	130-1	316-3	722-2	477-3	765-2	205-3
0.280	259-1	118-2	262-1	154-2	264-1	371-3	816-2	484-3	834-2	228-3	480-2	296-3	512-2	165-3	308-2	219-3	371-2	117-3	211-2	163-3	259-1	118-2	262-1	154-2	264-1	371-3	816-2	484-3	834-2	228-3
0.300	681-2	403-3	807-2	458-3	845-2	294-3	527-2	333-3	615-2	212-3	391-2	242-3	444-2	171-3	315-2	201-3	359-2	127-3	238-2	154-3	681-2	403-3	807-2	458-3	845-2	294-3	527-2	333-3	615-2	
0.320	138-1	852-3	161-1	851-3	167-1	353-3	669-2	352-3	694-2	255-3	475-2	254-3	501-2	201-3	357-2	204-3	396-2	138-3	266-2	150-3	138-1	852-3	161-1	851-3	167-1	353-3	669-2	352-3	694-2	255-3
0.340	340-1	186-2	343-1	164-2	344-1	497-3	895-2	439-3	918-2	337-3	612-2	296-3	623-2	2																

11IG114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S60E

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT					DAMPING = 2 PER CENT					DAMPING = 5 PER CENT					DAMPING = 10 PER CENT					DAMPING = 20 PER CENT																					
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV								
0.75	346-1	413-2	346-1	752-3	346-1	159-2	130-1	290-3	133-1	106-2	867-2	195-3	896-2	787-3	757-2	145-3	659-2	659-3	593-2	127-3	552-2	659-3	593-2	127-3	552-2	659-3	593-2	127-3	552-2	659-3	593-2	127-3	552-2	659-3	593-2	127-3	552-2				
0.80	719-2	183-2	150-1	292-3	143-1	135-2	115-1	215-3	106-1	101-2	917-2	162-3	797-2	912-3	787-2	148-3	716-2	744-3	598-2	127-3	585-2	744-3	598-2	127-3	585-2	744-3	598-2	127-3	585-2	744-3	598-2	127-3	585-2	744-3	598-2	127-3	585-2				
0.85	246-1	385-2	279-1	545-3	284-1	198-2	138-1	281-3	146-1	138-2	978-2	196-3	102-1	103-2	799-2	149-3	763-2	823-3	598-2	126-3	608-2	823-3	598-2	126-3	608-2	823-3	598-2	126-3	608-2	823-3	598-2	126-3	608-2	823-3	598-2	126-3	608-2				
0.90	356-1	550-2	381-1	695-3	384-1	305-2	209-1	385-3	213-1	169-2	117-1	215-3	118-1	114-2	788-2	148-3	796-2	891-3	584-2	123-3	622-2	891-3	584-2	123-3	622-2	891-3	584-2	123-3	622-2	891-3	584-2	123-3	622-2	891-3	584-2	123-3	622-2				
0.95	416-2	176-2	114-1	199-3	116-1	158-2	997-2	180-3	104-1	143-2	909-2	163-3	948-2	122-2	748-2	143-3	812-2	945-3	558-2	118-3	625-2	945-3	558-2	118-3	625-2	945-3	558-2	118-3	625-2	945-3	558-2	118-3	625-2	945-3	558-2	118-3	625-2				
1.00	111-1	217-2	129-1	222-3	136-1	187-2	119-1	191-3	117-1	158-2	104-1	162-3	996-2	128-2	803-2	135-3	805-2	979-3	567-2	113-3	615-2	979-3	567-2	113-3	615-2	979-3	567-2	113-3	615-2	979-3	567-2	113-3	615-2	979-3	567-2	113-3	615-2				
1.10	304-1	539-2	306-1	455-3	308-1	281-2	153-1	238-3	160-1	192-2	110-1	163-3	109-1	146-2	796-2	126-3	835-2	105-2	629-2	980-4	602-2	105-2	629-2	980-4	602-2	105-2	629-2	980-4	602-2	105-2	629-2	980-4	602-2	105-2	629-2	980-4	602-2				
1.20	360-1	689-2	360-1	489-3	361-1	403-2	206-1	286-3	211-1	270-2	141-1	192-3	141-1	193-2	960-2	140-3	101-1	134-2	655-2	102-3	702-2	134-2	655-2	102-3	702-2	134-2	655-2	102-3	702-2	134-2	655-2	102-3	702-2	134-2	655-2	102-3	702-2				
1.30	877-2	413-2	190-1	250-3	199-1	350-2	159-1	211-3	169-1	296-2	126-1	180-3	143-1	231-2	100-1	143-3	112-1	155-2	709-2	102-3	753-2	155-2	709-2	102-3	753-2	155-2	709-2	102-3	753-2	155-2	709-2	102-3	753-2	155-2	709-2	102-3	753-2				
1.40	531-1	119-1	537-1	625-3	537-1	484-2	219-1	253-3	217-1	366-2	168-1	192-3	164-1	274-2	123-1	146-3	123-1	184-2	782-2	104-3	826-2	184-2	782-2	104-3	826-2	184-2	782-2	104-3	826-2	184-2	782-2	104-3	826-2	184-2	782-2	104-3	826-2				
1.50	164-1	762-2	331-1	346-3	319-1	592-2	244-1	269-3	248-1	473-2	187-1	216-3	198-1	345-2	127-1	160-3	144-1	221-2	799-2	107-3	926-2	144-1	221-2	799-2	107-3	926-2	144-1	221-2	799-2	107-3	926-2	144-1	221-2	799-2	107-3	926-2	144-1	221-2	799-2	107-3	926-2
1.60	369-1	100-1	397-1	402-3	396-1	655-2	251-1	262-3	257-1	532-2	194-1	213-3	208-1	391-2	139-1	160-3	153-1	248-2	865-2	108-3	976-2	160-3	153-1	248-2	865-2	108-3	976-2	160-3	153-1	248-2	865-2	108-3	976-2	160-3	153-1	248-2	865-2	108-3	976-2		
1.70	357-1	979-2	366-1	346-3	361-1	653-2	245-1	231-3	241-1	535-2	192-1	190-3	162-3	178-1	387-2	148-1	124-3	265-2	996-2	953-4	928-2	148-1	387-2	148-1	124-3	265-2	996-2	953-4	928-2	148-1	387-2	148-1	124-3	265-2	996-2	953-4	928-2	148-1	387-2		
1.80	166-1	909-2	325-1	287-3	317-1	649-2	231-1	205-3	226-1	512-2	190-1	162-3	178-1	387-2	148-1	124-3	265-2	996-2	953-4	928-2	190-1	512-2	190-1	162-3	178-1	387-2	148-1	124-3	265-2	996-2	953-4	928-2	190-1	512-2	190-1	162-3	178-1	387-2			
1.90	415-1	126-1	422-1	357-3	417-1	633-2	220-1	179-3	209-1	482-2	187-1	137-3	159-1	370-2	151-1	107-3	122-1	261-2	103-1	857-4	866-2	151-1	370-2	151-1	107-3	122-1	261-2	103-1	857-4	866-2	151-1	370-2	151-1	107-3	122-1	261-2	103-1	857-4			
2.00	329-1	106-1	345-1	271-3	333-1	647-2	208-1	165-3	203-1	450-2	174-1	115-3	141-1	351-2	146-1	915-4	110-1	254-2	106-1	753-4	800-2	146-1	351-2	146-1	915-4	110-1	254-2	106-1	753-4	800-2	146-1	351-2	146-1	915-4	110-1	254-2	106-1	753-4			
2.20	646-2	547-2	159-1	115-3	156-1	435-2	145-1	922-4	124-1	384-2	138-1	818-4	109-1	326-2	125-1	715-4	933-2	244-2	100-1	566-4	697-2	125-1	326-2	125-1	715-4	933-2	244-2	100-1	566-4	697-2	125-1	326-2	125-1	715-4	933-2	244-2	100-1	566-4			
2.40	120-1	582-2	157-1	103-3	152-1	416-2	128-1	740-4	109-1	335-2	121-1	601-4	879-2	291-2	109-1	535-4	763-2	228-2	905-2	461-4	597-2	109-1	335-2	121-1	601-4	879-2	291-2	109-1	535-4	763-2	228-2	905-2	461-4	597-2	109-1	335-2	121-1	601-4			
2.60	130-1	574-2	138-1	868-4	138-1	357-2	110-1	542-4	864-2	290-2	105-1	442-4	701-2	252-2	981-2	397-4	610-2	207-2	845-2	371-4	500-2	981-2	397-4	610-2	207-2	845-2	371-4	500-2	981-2	397-4	610-2	207-2	845-2	371-4	500-2	981-2	397-4	610-2			
2.80	290-2	301-2	907-2	393-4	676-2	284-2	904-2	371-4	638-2	262-2	893-2	344-4	588-2	232-2	863-2	317-4	522-2	193-2	788-2	238-4	385-2	863-2	317-4	522-2	193-2	788-2	238-4	385-2	863-2	317-4	522-2	193-2	788-2	238-4	385-2	863-2	317-4	522-2			
3.00	221-2	287-2	860-2	326-4	601-2	267-2	822-2	304-4	560-2	249-2	771-2	286-4	522-2	227-2	757-2	267-4	476-2	192-2	731-2	269-4	403-2	757-2	267-4	476-2	192-2	731-2	269-4	403-2	757-2	267-4	476-2	192-2	731-2	269-4	403-2	757-2	267-4	476-2			
3.20	567-2	317-2	796-2	317-4	623-2	256-2	776-2	256-4	502-2	242-2	748-2	245-4	475-2	226-2	707-2	234-4	444-2	196-2	681-2	238-4	385-2	707-2	234-4	444-2	196-2	681-2	238-4	385-2	707-2	234-4	444-2	196-2	681-2	238-4	385-2	707-2	234-4	444-2			
3.40	389-2	280-2	796-2	248-4	518-2	246-2	777-2	218-4	455-2	233-2	750-2	210-4	431-2	226-2	709-2	209-4	418-2	200-2	642-2	210-4	370-2	418-2	209-4	418-2	200-2	642-2	210-4	370-2	418-2	209-4	418-2	200-2	642-2	210-4	370-2	418-2	209-4	418-2			
3.60	647-2	379-2	787-2	299-4	662-2	287-2	770-2	226-4	501-2	253-2	745-2	202-4	441-2	238-2	708-2	196-4	415-2	204-2	643-2	190-4	357-2	708-2	196-4	415-2	204-2	643-2	190-4	357-2	708-2	196-4	415-2	204-2	643-2	190-4	357-2	708-2	196-4	415-2			
3.80	663-2	453-2	793-2	320-4	749-2	334-2	757-2	237-4	553-2	293-2	735-2	211-4	486-2	252-2	701-2	188-4	417-2	207-2	638-2	145-4	301-2	486-2	252-2	701-2	188-4	417-2	207-2	638-2	145-4	301-2	486-2	252-2	701-2	188-4	417-2	207-2	638-2				
4.00	569-2	412-2	756-2	263-4	648-2	358-2	740-2	229-4	562-2	304-2	721-2	197-4	477-2	253-2	692-2	172-4	397-2	205-2	638-2	160-4	323-2	692-2	172-4	397-2	205-2	638-2	160-4	323-2	692-2	172-4	397-2	205-2	638-2	160-4	323-2	692-2	172-4	397-2			
4.20	461-2	345-2	806-2	200-4	517-2	307-2	725-2	725-2	660-2	271-2	705-2	159-4	405-2	236-2	680-2	148-4	353-2	201-2	633-2	145-4	301-2	405-2	236-2	680-2	148-4	353-2	201-2	633-2	145-4	301-2	405-2	236-2									

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S30W
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

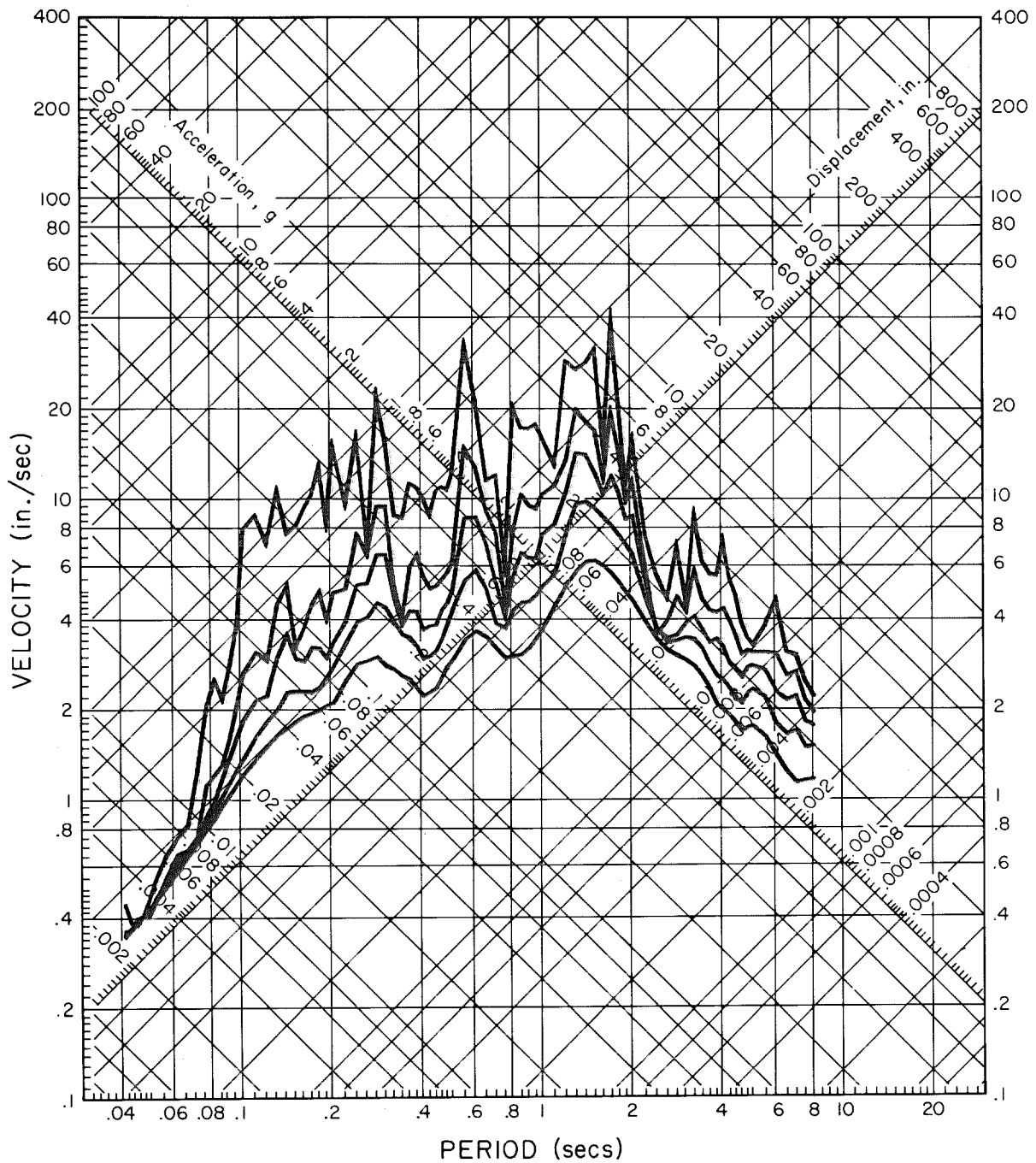


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

111G114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S30H

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IIIG114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP S30W

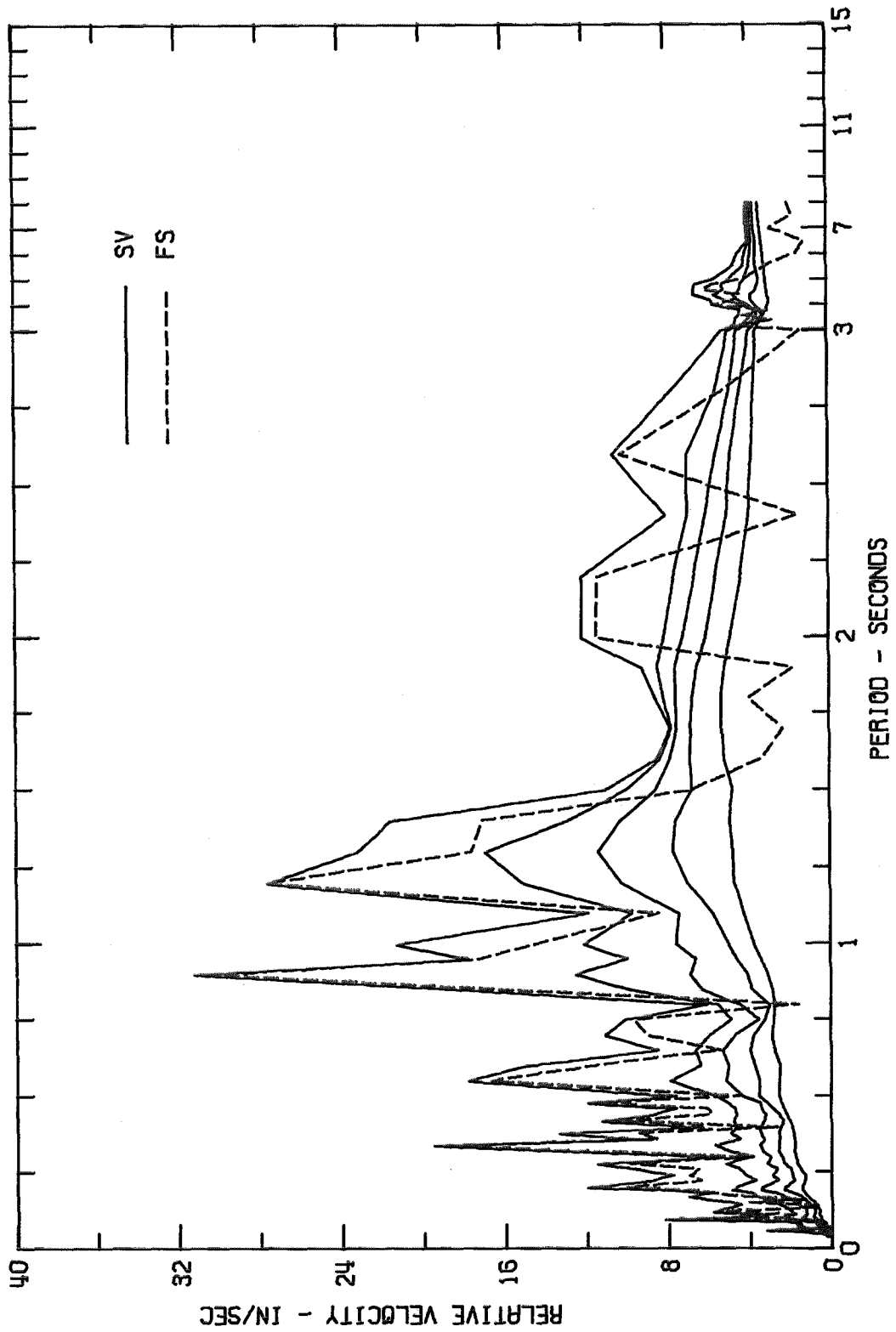
THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT										DAMPING = 2 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV								
0.040	163-3	287-5	225-3	184-3	452-3	233-5	928-4	149-3	367-3	226-5	998-4	145-3	356-3	225-5	969-4	144-3	354-3	223-5	904-4	143-3	351-3	223-5	904-4	143-3	351-3	223-5	904-4	143-3	351-3	223-5	904-4	143-3	351-3	223-5	904-4	143-3	351-3	223-5	904-4	143-3	351-3	223-5	904-4	143-3	351-3				
0.042	709-4	262-5	171-3	152-3	392-3	248-5	117-3	143-3	371-3	251-5	110-3	146-3	376-3	249-5	106-3	145-3	373-3	248-5	100-3	144-3	371-3	248-5	100-3	144-3	371-3	248-5	100-3	144-3	371-3	248-5	100-3	144-3	371-3	248-5	100-3	144-3	371-3	248-5	100-3	144-3	371-3	248-5	100-3	144-3	371-3				
0.044	403-4	268-5	159-3	142-3	383-3	283-5	124-3	149-3	405-3	278-5	122-3	147-3	398-3	276-5	119-3	146-3	394-3	274-5	111-3	145-3	391-3	274-5	111-3	145-3	391-3	274-5	111-3	145-3	391-3	274-5	111-3	145-3	391-3	274-5	111-3	145-3	391-3	274-5	111-3	145-3	391-3	274-5	111-3	145-3	391-3				
0.046	833-4	302-5	192-3	146-3	413-3	302-5	156-3	146-3	413-3	301-5	142-3	145-3	412-3	302-5	132-3	146-3	413-3	302-5	124-3	147-3	412-3	302-5	124-3	147-3	412-3	302-5	124-3	147-3	412-3	302-5	124-3	147-3	412-3	302-5	124-3	147-3	412-3	302-5	124-3	147-3	412-3	302-5	124-3	147-3	412-3				
0.048	369-4	357-5	217-3	158-3	467-3	313-5	178-3	139-3	410-3	323-5	158-3	143-3	423-3	330-5	145-3	147-3	432-3	332-5	137-3	148-3	434-3	332-5	137-3	148-3	434-3	332-5	137-3	148-3	434-3	332-5	137-3	148-3	434-3	332-5	137-3	148-3	434-3	332-5	137-3	148-3	434-3	332-5	137-3	148-3	434-3				
0.050	348-3	419-5	409-3	171-3	527-3	352-5	188-3	144-3	443-3	361-5	166-3	148-3	454-3	365-5	156-3	149-3	458-3	363-5	150-3	149-3	458-3	363-5	150-3	149-3	458-3	363-5	150-3	149-3	458-3	363-5	150-3	149-3	458-3	363-5	150-3	149-3	458-3	363-5	150-3	149-3	458-3	363-5	150-3	149-3	458-3				
0.055	388-3	581-5	496-3	196-3	663-3	484-5	191-3	163-3	553-3	478-5	180-3	161-3	546-3	468-5	185-3	158-3	535-3	453-5	187-3	155-3	517-3	453-5	187-3	155-3	517-3	453-5	187-3	155-3	517-3	453-5	187-3	155-3	517-3	453-5	187-3	155-3	517-3	453-5	187-3	155-3	517-3	453-5	187-3	155-3	517-3				
0.060	341-3	724-5	479-3	205-3	758-3	635-5	256-3	180-3	665-3	601-5	242-3	170-3	629-3	581-5	239-3	165-3	608-3	558-5	233-3	160-3	584-3	558-5	233-3	160-3	584-3	558-5	233-3	160-3	584-3	558-5	233-3	160-3	584-3	558-5	233-3	160-3	584-3	558-5	233-3	160-3	584-3	558-5	233-3	160-3	584-3				
0.065	235-3	860-5	547-3	208-3	831-3	713-5	333-3	172-3	689-3	706-5	321-3	171-3	683-3	696-5	305-3	170-3	673-3	676-5	287-3	165-3	653-3	676-5	287-3	165-3	653-3	676-5	287-3	165-3	653-3	676-5	287-3	165-3	653-3	676-5	287-3	165-3	653-3	676-5	287-3	165-3	653-3	676-5	287-3	165-3	653-3				
0.070	105-2	142-4	115-2	298-3	128-2	854-5	458-3	178-3	767-3	840-5	417-3	176-3	754-3	837-5	370-3	174-3	751-3	807-5	351-3	170-3	724-3	807-5	351-3	170-3	724-3	807-5	351-3	170-3	724-3	807-5	351-3	170-3	724-3	807-5	351-3	170-3	724-3	807-5	351-3	170-3	724-3	807-5	351-3	170-3	724-3				
0.075	134-2	248-4	189-2	482-3	208-2	135-4	716-3	245-3	113-2	106-4	563-3	194-3	891-3	100-4	468-3	183-3	845-3	953-5	423-3	177-3	798-3	953-5	423-3	177-3	798-3	953-5	423-3	177-3	798-3	953-5	423-3	177-3	798-3	953-5	423-3	177-3	798-3	953-5	423-3	177-3	798-3	953-5	423-3	177-3	798-3				
0.080	136-2	325-4	232-2	519-3	255-2	157-4	101-2	250-3	123-2	127-4	762-3	206-3	100-2	120-4	623-3	192-3	943-3	111-4	503-3	184-3	879-3	111-4	503-3	184-3	879-3	111-4	503-3	184-3	879-3	111-4	503-3	184-3	879-3	111-4	503-3	184-3	879-3	111-4	503-3	184-3	879-3	111-4	503-3	184-3	879-3				
0.085	631-3	296-4	211-2	419-3	219-2	180-4	117-2	253-3	133-2	163-4	100-2	229-3	120-2	141-4	784-3	202-3	104-2	131-4	603-3	190-3	970-3	131-4	603-3	190-3	970-3	131-4	603-3	190-3	970-3	131-4	603-3	190-3	970-3	131-4	603-3	190-3	970-3	131-4	603-3	190-3	970-3	131-4	603-3	190-3	970-3				
0.090	270-2	413-4	271-2	521-3	288-2	236-4	153-2	299-3	165-2	203-4	128-2	260-3	141-2	166-4	963-3	213-3	116-2	151-4	709-3	196-3	106-2	166-4	963-3	213-3	116-2	151-4	709-3	196-3	106-2	166-4	963-3	213-3	116-2	151-4	709-3	196-3	106-2	166-4	963-3	213-3	116-2	151-4	709-3	196-3	106-2				
0.095	377-2	596-4	394-2	675-3	394-2	322-4	197-2	365-3	213-2	251-4	157-2	287-3	166-2	194-4	114-2	222-3	128-2	173-4	816-3	201-3	114-2	222-3	128-2	173-4	816-3	201-3	114-2	222-3	128-2	173-4	816-3	201-3	114-2	222-3	128-2	173-4	816-3	201-3	114-2	222-3	128-2	173-4	816-3	201-3	114-2	222-3	128-2		
0.100	799-2	129-3	793-2	132-2	812-2	430-4	245-2	441-3	270-2	300-4	176-2	304-3	188-2	222-4	126-2	226-3	140-2	197-4	918-3	205-3	123-2	222-4	126-2	226-3	140-2	197-4	918-3	205-3	123-2	222-4	126-2	226-3	140-2	197-4	918-3	205-3	123-2	222-4	126-2	226-3	140-2	197-4	918-3	205-3	123-2				
0.110	461-2	158-3	888-2	134-2	905-2	553-4	304-2	470-3	316-2	382-4	215-2	328-3	218-2	289-4	144-2	248-3	165-2	243-4	113-2	215-3	139-2	215-2	328-3	218-2	289-4	144-2	248-3	165-2	243-4	113-2	215-3	139-2	215-2	328-3	218-2	289-4	144-2	248-3	165-2	243-4	113-2	215-3	139-2	215-2	328-3	218-2			
0.120	573-2	139-3	710-2	991-3	731-2	566-4	277-2	402-3	296-2	433-4	210-2	308-3	226-2	356-4	177-2	253-3	186-2	295-4	135-2	221-3	154-2	295-4	135-2	221-3	154-2	295-4	135-2	221-3	154-2	295-4	135-2	221-3	154-2	295-4	135-2	221-3	154-2	295-4	135-2	221-3	154-2	295-4	135-2	221-3	154-2				
0.130	928-2	226-3	107-1	137-2	109-1	951-4	461-2	573-3	459-2	627-4	295-2	378-3	303-2	422-4	196-2	262-3	203-2	347-4	148-2	219-3	167-2	422-4	196-2	262-3	203-2	347-4	148-2	219-3	167-2	422-4	196-2	262-3	203-2	347-4	148-2	219-3	167-2	422-4	196-2	262-3	203-2	347-4	148-2	219-3	167-2				
0.140	508-2	174-3	766-2	913-3	785-2	119-3	509-2	627-3	459-2	810-4	331-2	425-3	363-2	517-4	222-2	273-3	232-2	392-4	167-2	217-3	176-2	517-4	222-2	273-3	232-2	392-4	167-2	217-3	176-2	517-4	222-2	273-3	232-2	392-4	167-2	217-3	176-2	517-4	222-2	273-3	232-2	392-4	167-2	217-3	176-2				
0.150	791-2	199-3	829-2	907-3	836-2	784-4	315-2	356-3	328-2	715-4	271-2	330-3	299-2	559-4	234-2	259-3	234-2	445-4	177-2	216-3	186-2	559-4	234-2	259-3	234-2	445-4	177-2	216-3	186-2	559-4	234-2	259-3	234-2	445-4	177-2	216-3	186-2	559-4	234-2	259-3	234-2	445-4	177-2	216-3	186-2				
0.160	901-2	243-3	948-2	974-3	957-2	982-4	377-2	394-3	385-2	749-4	291-2	303-3	294-2	595-4	246-2	240-3	234-2	494-4	183-2	210-3	194-2	595-4	246-2	240-3	234-2	494-4	183-2	210-3																					

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	DAMPING = 0 PER CENT				DAMPING = 2 PER CENT				DAMPING = 5 PER CENT				DAMPING = 10 PER CENT				DAMPING = 20 PER CENT				
	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	434-2	735-3	650-2	133-3	616-2	551-3	535-2	100-3	461-2	495-3	441-2	903-4	415-2	452-3	369-2	844-4	379-2	359-3	307-2	711-4	301-2
0.80	198-1	264-2	206-1	422-3	207-1	102-2	824-2	163-3	804-2	729-3	562-2	116-3	572-2	558-3	429-2	907-4	438-2	388-3	345-2	676-4	304-2
0.85	958-2	238-2	170-1	337-3	176-1	142-2	102-1	201-3	105-1	923-3	637-2	131-3	682-2	627-3	494-2	908-4	463-2	419-3	376-2	645-4	309-2
0.90	117-1	249-2	171-1	315-3	174-1	138-2	944-2	175-3	967-2	937-3	653-2	119-3	654-2	667-3	525-2	860-4	466-2	466-3	399-2	634-4	325-2
0.95	165-1	272-2	179-1	308-3	180-1	143-2	100-1	162-3	946-2	991-3	689-2	112-3	655-2	741-3	567-2	853-4	490-2	530-3	409-2	650-4	350-2
1.00	134-1	259-2	159-1	265-3	163-1	167-2	113-1	171-3	105-1	123-2	838-2	126-3	776-2	838-3	616-2	873-4	526-2	598-3	407-2	661-4	375-2
1.10	500-2	231-2	132-1	195-3	132-1	197-2	116-1	166-3	112-1	147-2	912-2	125-3	841-2	101-2	626-2	869-4	578-2	794-3	416-2	708-4	453-2
1.20	220-1	559-2	292-1	397-3	293-1	262-2	148-1	186-3	137-1	206-2	103-1	147-3	107-1	149-2	754-2	108-3	785-2	101-2	540-2	760-4	530-2
1.30	220-1	568-2	279-1	344-3	274-1	420-2	206-1	254-3	203-1	299-2	153-1	182-3	144-1	201-2	105-1	125-3	975-2	121-2	629-2	782-4	591-2
1.40	181-1	644-2	283-1	336-3	289-1	412-2	195-1	215-3	185-1	318-2	150-1	167-3	143-1	221-2	108-1	117-3	995-2	141-2	681-2	788-4	635-2
1.50	248-1	770-2	321-1	350-3	322-1	410-2	172-1	186-3	171-1	294-2	133-1	134-3	123-1	226-2	103-1	105-3	948-2	152-2	691-2	764-4	639-2
1.60	863-2	386-2	166-1	154-3	151-1	303-2	132-1	121-3	119-1	268-2	118-1	108-3	105-1	224-2	975-2	918-4	882-2	156-2	668-2	699-4	616-2
1.70	389-1	108-1	401-1	384-3	401-1	531-2	195-1	190-3	146-1	302-2	122-1	116-3	120-1	224-2	897-2	811-4	829-2	157-2	662-2	617-4	581-2
1.80	566-1	592-2	214-1	187-3	206-1	419-2	155-1	132-3	146-1	302-2	116-1	960-4	105-1	220-2	902-2	717-4	771-2	154-2	678-2	540-4	540-2
1.90	708-2	341-2	130-1	967-4	112-1	301-2	118-1	855-4	997-2	263-2	103-1	750-4	871-2	218-2	874-2	632-4	721-2	151-2	673-2	476-4	500-2
2.00	119-1	514-2	174-1	131-3	161-1	372-2	124-1	953-4	117-1	283-2	965-2	729-4	890-2	213-2	822-2	560-4	670-2	148-2	652-2	430-4	466-2
2.20	679-2	269-2	918-2	570-4	770-2	216-2	773-2	458-4	618-2	191-2	726-2	409-4	548-2	167-2	687-2	362-4	478-2	139-2	592-2	341-4	399-2
2.40	568-2	217-2	568-2	385-4	568-2	137-2	556-2	243-4	358-2	143-2	570-2	259-4	376-2	145-2	585-2	265-4	380-2	132-2	550-2	274-4	347-2
2.60	304-2	196-2	574-2	297-4	475-2	167-2	551-2	253-4	404-2	144-2	554-2	221-4	349-2	140-2	551-2	219-4	340-2	132-2	519-2	232-4	320-2
2.80	576-2	319-2	750-2	416-4	716-2	215-2	607-2	281-4	483-2	159-2	577-2	211-4	358-2	152-2	543-2	206-4	343-2	136-2	500-2	205-4	306-2
3.00	214-2	221-2	626-2	251-4	463-2	205-2	594-2	234-4	430-2	188-2	559-2	217-4	395-2	168-2	536-2	200-4	352-2	141-2	505-2	184-4	295-2
3.20	835-2	460-2	897-2	460-4	904-2	302-2	626-2	302-4	594-2	211-2	597-2	212-4	415-2	176-2	561-2	187-4	347-2	143-2	512-2	164-4	281-2
3.40	630-2	342-2	712-2	302-4	632-2	256-2	654-2	226-4	473-2	203-2	618-2	182-4	375-2	175-2	573-2	166-4	323-2	141-2	515-2	148-4	261-2
3.60	434-2	330-2	759-2	260-4	576-2	248-2	644-2	196-4	433-2	193-2	612-2	154-4	338-2	164-2	570-2	140-4	286-2	135-2	513-2	132-4	236-2
3.80	341-2	344-2	719-2	244-4	569-2	259-2	611-2	183-4	429-2	210-2	586-2	150-4	347-2	157-2	553-2	117-4	260-2	127-2	505-2	116-4	210-2
4.00	707-2	474-2	770-2	303-4	744-2	280-2	575-2	179-4	440-2	207-2	549-2	133-4	326-2	160-2	527-2	110-4	252-2	128-2	492-2	110-4	201-2
4.20	366-2	368-2	598-2	213-4	551-2	266-2	519-2	154-4	399-2	191-2	507-2	112-4	286-2	157-2	497-2	102-4	236-2	129-2	477-2	103-4	193-2
4.40	432-2	340-2	614-2	179-4	485-2	248-2	536-2	131-4	354-2	191-2	466-2	103-4	272-2	154-2	467-2	924-5	220-2	127-2	460-2	957-5	182-2
4.60	392-2	287-2	556-2	138-4	392-2	226-2	507-2	109-4	309-2	188-2	447-2	935-5	258-2	155-2	439-2	821-5	212-2	125-2	444-2	880-5	171-2
4.80	101-2	267-2	477-2	118-4	349-2	243-2	456-2	108-4	318-2	212-2	432-2	967-5	278-2	175-2	416-2	859-5	229-2	135-2	430-2	827-5	176-2
5.00	261-2	264-2	467-2	108-4	332-2	248-2	451-2	102-4	312-2	224-2	430-2	942-5	281-2	187-2	402-2	855-5	236-2	141-2	417-2	812-5	178-2
5.50	257-2	338-2	448-2	114-4	386-2	274-2	434-2	920-5	313-2	238-2	414-2	833-5	273-2	195-2	392-2	753-5	223-2	144-2	393-2	728-5	164-2
6.00	473-2	452-2	577-2	128-4	473-2	296-2	535-2	843-5	310-2	221-2	485-2	637-5	231-2	173-2	424-2	570-5	181-2	136-2	382-2	603-5	142-2
6.50	232-2	325-2	574-2	788-5	314-2	270-2	534-2	658-5	261-2	225-2	485-2	562-5	217-2	172-2	427-2	487-5	167-2	129-2	378-2	503-5	125-2
7.00	179-2	341-2	446-2	712-5	306-2	299-2	433-2	628-5	268-2	249-2	415-2	533-5	224-2	192-2	388-2	459-5	172-2	128-2	380-2	430-5	115-2
7.50	187-2	297-2	432-2	540-5	248-2	258-2	412-2	472-5	216-2	221-2	386-2	420-5	185-2	181-2	378-2	377-5	151-2	140-2	385-2	380-5	117-2
8.00	223-2	284-2	404-2	454-5	223-2	251-2	391-2	405-5	197-2	227-2	390-2	382-5	178-2	195-2	389-2	362-5	153-2	150-2	390-2	362-5	118-2

RELATIVE VELOCITY RESPONSE SPECTRUM
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
111G114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP DOWN
DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL

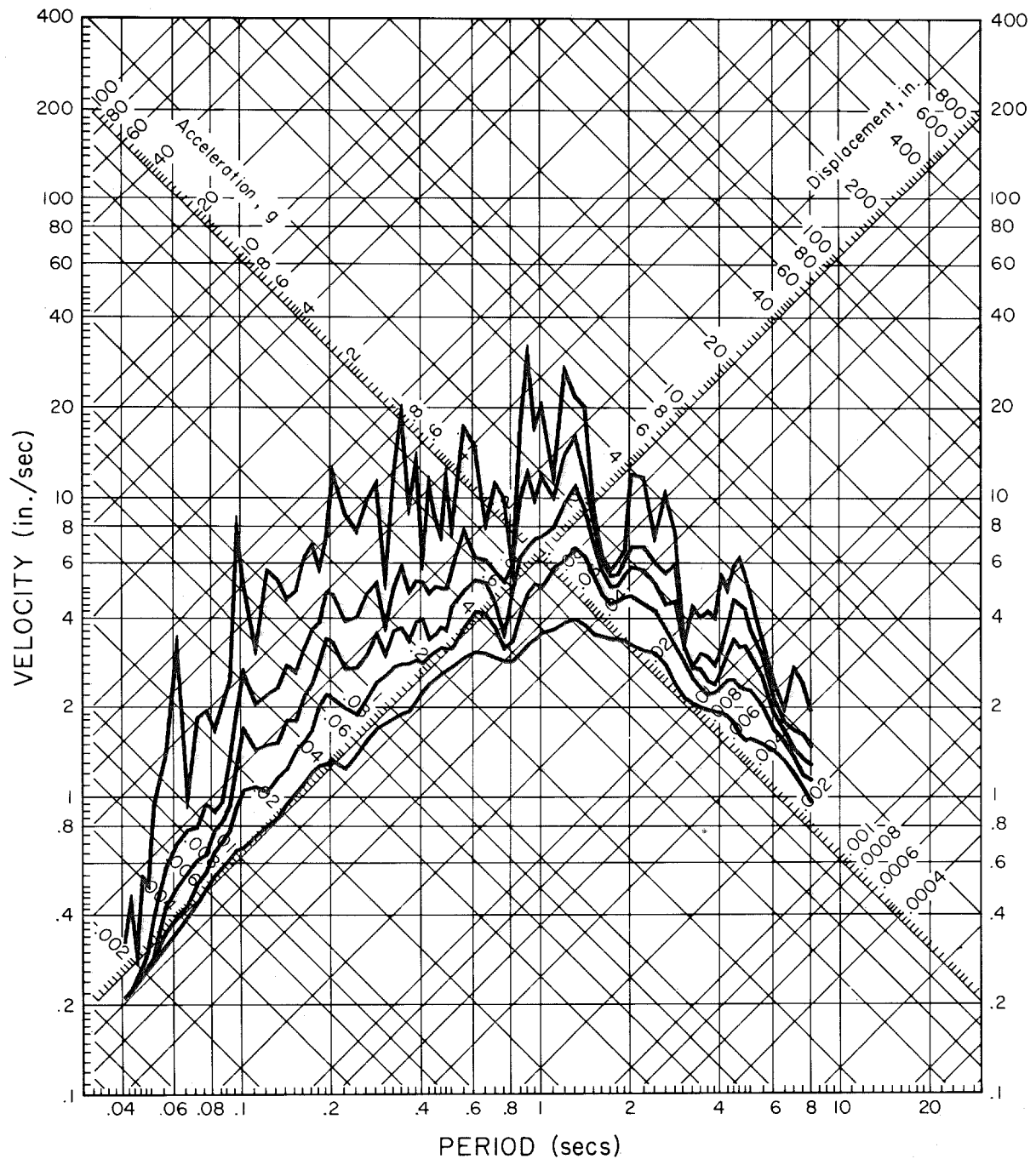


RESPONSE SPECTRUM

SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST

IIIG114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP DOWN

DAMPING VALUES ARE 0, 2, 5, 10 AND 20 PERCENT OF CRITICAL



SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
 IIIG114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

DAMPING = 0 PER CENT										DAMPING = 5 PER CENT										DAMPING = 10 PER CENT										DAMPING = 20 PER CENT									
PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV						
0.040	186-3	212-5	263-3	135-3	333-3	138-5	115-3	884-4	217-3	138-5	805-4	884-4	217-3	138-5	751-4	885-4	217-3	138-5	681-4	887-4	217-3	138-5	681-4	887-4	217-3	138-5	681-4	887-4	217-3	138-5	681-4	887-4	217-3						
0.042	298-3	306-5	352-3	177-3	457-3	152-5	111-3	885-4	228-3	152-5	864-4	883-4	227-3	153-5	823-4	890-4	229-3	153-5	756-4	894-4	229-3	153-5	756-4	894-4	229-3	153-5	756-4	894-4	229-3	153-5	756-4	894-4	229-3						
0.044	970-4	211-5	160-3	111-3	301-3	177-5	111-3	935-4	252-3	169-5	965-4	896-4	242-3	169-5	895-4	897-4	242-3	170-5	840-4	902-4	242-3	170-5	840-4	902-4	242-3	170-5	840-4	902-4	242-3	170-5	840-4	902-4	242-3						
0.046	155-3	404-5	394-3	195-3	552-3	204-5	160-3	987-4	278-3	187-5	120-3	912-4	256-3	187-5	106-3	908-4	256-3	187-5	928-4	911-4	256-3	187-5	928-4	911-4	256-3	187-5	928-4	911-4	256-3	187-5	928-4	911-4	256-3						
0.048	240-3	394-5	455-3	175-3	517-3	237-5	234-3	105-3	311-3	212-5	156-3	939-4	277-3	207-5	123-3	921-4	271-3	206-5	101-3	922-4	270-3	206-5	101-3	922-4	270-3	206-5	101-3	922-4	270-3	206-5	101-3	922-4	270-3						
0.050	869-3	763-5	878-3	312-3	959-3	317-5	288-3	129-3	398-3	234-5	185-3	960-4	294-3	229-5	132-3	939-4	288-3	226-5	107-3	933-4	284-3	226-5	107-3	933-4	284-3	226-5	107-3	933-4	284-3	226-5	107-3	933-4	284-3						
0.055	521-3	125-4	126-2	423-3	143-2	521-5	382-3	175-3	595-3	385-5	262-3	129-3	440-3	314-5	179-3	107-3	359-3	283-5	134-3	966-4	323-3	283-5	134-3	966-4	323-3	283-5	134-3	966-4	323-3	283-5	134-3	966-4	323-3						
0.060	292-2	317-4	326-2	901-3	332-2	686-5	532-3	195-3	718-3	489-5	355-3	139-3	512-3	387-5	237-3	110-3	405-3	346-5	158-3	100-3	363-3	346-5	158-3	100-3	363-3	346-5	158-3	100-3	363-3	346-5	158-3	100-3	363-3						
0.065	540-3	104-4	809-3	253-3	101-2	819-5	604-3	197-3	792-3	591-5	385-3	143-3	571-3	457-5	268-3	111-3	442-3	417-5	198-3	103-3	403-3	417-5	198-3	103-3	403-3	417-5	198-3	103-3	403-3	417-5	198-3	103-3	403-3						
0.070	109-3	209-4	171-2	437-3	187-2	902-5	662-3	188-3	810-3	699-5	431-3	145-3	627-3	582-5	317-3	123-3	523-3	499-5	248-3	107-3	448-3	499-5	248-3	107-3	448-3	499-5	248-3	107-3	448-3	499-5	248-3	107-3	448-3						
0.075	533-3	237-4	172-2	432-3	199-2	115-4	763-3	211-3	970-3	785-5	512-3	142-3	657-3	688-5	385-3	125-3	576-3	599-5	301-3	113-3	502-3	599-5	301-3	113-3	502-3	599-5	301-3	113-3	502-3	599-5	301-3	113-3	502-3						
0.080	388-3	218-4	159-2	348-3	171-2	116-4	796-3	185-3	914-3	100-4	537-3	163-3	790-3	854-5	441-3	138-3	671-3	709-5	355-3	116-3	557-3	709-5	355-3	116-3	557-3	709-5	355-3	116-3	557-3	709-5	355-3	116-3	557-3						
0.085	440-3	282-4	186-2	399-3	208-2	133-4	862-3	189-3	986-3	114-4	647-3	163-3	849-3	987-5	530-3	141-3	730-3	807-5	411-3	118-3	596-3	987-5	411-3	118-3	596-3	987-5	411-3	118-3	596-3	987-5	411-3	118-3	596-3						
0.090	159-2	362-4	242-2	457-3	253-2	197-4	125-2	249-3	137-2	138-4	836-3	176-3	963-3	113-4	631-3	145-3	795-3	911-5	485-3	120-3	636-3	911-5	485-3	120-3	636-3	911-5	485-3	120-3	636-3	911-5	485-3	120-3	636-3						
0.095	804-2	124-3	825-2	141-2	825-2	305-4	192-2	346-3	202-2	199-4	116-2	227-3	132-2	145-4	832-3	165-3	959-3	102-4	548-3	121-3	680-3	102-4	548-3	121-3	680-3	102-4	548-3	121-3	680-3	102-4	548-3	121-3	680-3						
0.100	225-2	847-4	519-2	867-3	532-2	430-4	244-2	440-3	270-2	275-4	154-2	283-3	172-2	172-4	949-3	181-3	108-2	110-4	586-3	119-3	693-3	110-4	586-3	119-3	693-3	110-4	586-3	119-3	693-3	110-4	586-3	119-3	693-3						
0.110	183-2	563-4	310-2	476-3	321-2	367-4	194-2	310-3	209-2	257-4	131-2	218-3	147-2	194-4	909-3	168-3	110-2	132-4	642-3	119-3	759-3	110-2	132-4	642-3	119-3	759-3	110-2	132-4	642-3	119-3	759-3	110-2	132-4						
0.120	585-2	112-3	586-2	798-3	588-2	433-4	201-2	305-3	226-2	291-4	129-2	205-3	152-2	204-4	872-3	149-3	106-2	156-4	635-3	115-3	819-3	106-2	156-4	635-3	115-3	819-3	106-2	156-4	635-3	115-3	819-3	106-2	156-4						
0.130	143-2	113-3	532-2	684-3	546-2	495-4	218-2	301-3	239-2	321-4	129-2	193-3	155-2	246-4	882-3	149-3	119-2	179-4	703-3	116-3	869-3	119-2	179-4	703-3	116-3	869-3	119-2	179-4	703-3	116-3	869-3	119-2	179-4						
0.140	549-3	105-3	449-2	548-3	471-2	634-4	263-2	329-3	284-2	411-4	164-2	215-3	184-2	284-4	107-2	151-3	127-2	217-4	803-3	120-3	975-3	127-2	217-4	803-3	120-3	975-3	127-2	217-4	803-3	120-3	975-3	127-2	217-4						
0.150	409-2	120-3	491-2	546-3	503-2	644-4	249-2	294-3	270-2	437-4	163-2	202-3	183-2	349-4	121-2	163-3	146-2	253-4	908-3	122-3	106-2	146-2	253-4	908-3	122-3	106-2	146-2	253-4	908-3	122-3	106-2	146-2	253-4						
0.160	130-2	167-3	617-2	667-3	656-2	831-4	313-2	334-3	326-2	571-4	211-2	231-3	224-2	401-4	142-2	165-3	171-2	335-4	102-2	125-3	114-2	171-2	335-4	102-2	125-3	114-2	171-2	335-4	102-2	125-3	114-2	171-2	335-4						
0.170	432-2	195-3	705-2	692-3	722-2	101-3	371-2	358-3	376-2	669-4	235-2	236-3	247-2	463-4	151-2	166-3	171-2	335-4	102-2	125-3	114-2	171-2	335-4	102-2	125-3	114-2	171-2	335-4	102-2	125-3	114-2	171-2	335-4						
0.180	558-2	170-3	579-2	537-3	594-2	113-3	388-2	360-3	397-2	837-4	274-2	263-3	292-2	591-4	194-2	192-3	206-2	312-4	130-2	126-3	130-2	312-4	130-2	126-3	130-2	312-4	130-2	126-3	130-2	312-4	130-2	126-3	130-2						
0.190	705-2	230-3	778-2	654-3	763-2	150-3	489-2	428-3	497-2	106-3	346-2	304-3	351-2	687-4	233-2	200-3	227-2	398-4	143-2	122-3	131-2	227-2	398-4	143-2	122-3	131-2	227-2	398-4	143-2	122-3	131-2	227-2	398-4						
0.200	100-1	400-3	120-1	102-2	125-1	155-3	469-2	400-3	489-2	108-3	342-2	276-3	340-2	698-4	228-2	181-3	219-2	429-4	145-2	114-3	135-2	219-2	429-4	145-2	114-3	135-2	219-2	429-4	145-2	114-3	135-2	219-2	429-4						
0.220	640-2	316-3	885-2	668-3	903-2	140-3	370-2	294-3	400-2	966-4	262-2	207-3	275-2	710-4	184-2	151-3	203-2	446-4	135-2	998-4	127-2	446-4	135-2	998-4	127-2	446-4	135-2	998-4	127-2	446-4	135-2	998-4	127-2	446-4					
0.240	699-2	302-3	779-2	537-3	793-2	158-3	421-2	280-3	415-2	106-3	289-2	194-3	278-2	738-4	194-2	137-3	193-2	543-4	130-2	100-3	142-2	193-2	543-4	130-2	100-3	142-2	193-2	543-4	130-2	100-3	142-2	193-2	543-4						
0.260	654-2	419-3	952-2	635-3	101-1	203-3	453-2	308-3	491-2	128-3	270-2	193-3	310-2	911-4	203-2	139-3	220-2	657-4	153-2	104-3	158-2	220-2	657-4	153-2	104-3	158-2	220-2	657-4	153-2	104-3	158-2	220-2	657-4						
0.280	988-2	516-3	115-1	673-3	115-1	293-3	522-2	314-3	537-2	162-3	317-2	211-3	364-2</																										

111G114 71.064.0 PALMDALE FIRE STATION, STORAGE ROOM, PALMDALE, CAL. COMP DOWN

THE UNITS USED ARE SEC FOR PER, IN/SEC FOR FS, SV, AND PSV, IN FOR SD AND G FOR SA

PER	FS	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV	SD	SV	SA	PSV
0.75	966-2	121-2	101-1	221-3	102-1	643-3	491-2	116-3	538-2	434-3	354-2	790-4	363-2	387-3	326-2	718-4	324-2
0.80	157-2	749-3	607-2	119-3	588-2	788-3	553-2	126-3	619-2	633-3	444-2	101-3	497-2	437-3	302-2	711-4	343-2
0.85	162-1	242-2	181-1	343-3	179-1	138-2	993-2	196-3	102-1	884-3	637-2	125-3	654-2	574-3	391-2	830-4	424-2
0.90	304-1	448-2	313-1	565-3	312-1	179-2	125-1	227-3	125-1	101-2	692-2	128-3	705-2	712-3	413-2	920-4	497-2
0.95	174-1	268-2	177-1	304-3	177-1	152-2	994-2	173-3	100-1	113-2	662-2	129-3	751-2	800-3	463-2	925-4	529-2
1.00	144-1	333-2	213-1	341-3	209-1	192-2	121-1	197-3	121-1	121-2	758-2	125-3	765-2	820-3	503-2	850-4	515-2
1.10	840-2	212-2	118-1	179-3	121-1	179-2	973-2	152-3	102-1	143-2	745-2	122-3	820-2	104-2	582-2	902-4	599-2
1.20	276-1	528-2	276-1	375-3	276-1	275-2	151-1	195-3	144-1	189-2	102-1	135-3	990-2	121-2	700-2	882-4	638-2
1.30	176-1	462-2	231-1	280-3	223-1	342-2	169-1	207-3	165-1	233-2	114-1	141-3	112-1	144-2	772-2	895-4	700-2
1.40	171-1	458-2	216-1	239-3	205-1	271-2	129-1	141-3	121-1	208-2	103-1	109-3	936-2	145-2	763-2	780-4	653-2
1.50	673-2	225-2	109-1	102-3	943-2	201-2	992-2	646-4	634-2	148-2	787-2	599-4	584-2	133-2	679-2	621-4	559-2
1.60	340-2	166-2	848-2	666-4	654-2	161-2	832-2	515-4	569-2	149-2	758-2	475-4	522-2	132-2	672-2	427-4	463-2
1.70	231-2	158-2	782-2	561-4	586-2	152-2	777-2	540-4	563-2	140-2	750-2	499-4	517-2	123-2	680-2	443-4	455-2
1.80	398-2	181-2	856-2	571-4	632-2	163-2	816-2	515-4	569-2	149-2	758-2	475-4	522-2	132-2	672-2	427-4	463-2
1.90	181-2	208-2	926-2	591-4	690-2	192-2	850-2	546-4	637-2	172-2	762-2	491-4	569-2	144-2	654-2	421-4	477-2
2.00	114-1	390-2	121-1	998-4	122-1	244-2	811-2	522-4	704-2	191-2	716-2	493-4	602-2	153-2	607-2	405-4	483-2
2.20	113-1	421-2	121-1	889-4	120-1	246-2	761-2	522-4	704-2	206-2	660-2	440-4	588-2	159-2	558-2	347-4	454-2
2.40	150-2	288-2	803-2	512-4	755-2	237-2	695-2	422-4	621-2	202-2	606-2	363-4	530-2	164-2	501-2	306-4	431-2
2.60	102-1	440-2	106-1	666-4	106-1	237-2	692-2	360-4	574-2	187-2	554-2	286-4	452-2	156-2	480-2	247-4	376-2
2.80	524-2	352-2	774-2	459-4	790-2	275-2	553-2	359-4	617-2	206-2	484-2	270-4	462-2	146-2	433-2	197-4	329-2
3.00	139-2	160-2	518-2	182-4	335-2	156-2	488-2	178-4	327-2	156-2	446-2	180-4	328-2	138-2	386-2	164-4	290-2
3.20	444-2	227-2	451-2	227-4	447-2	143-2	414-2	143-4	282-2	142-2	391-2	144-4	279-2	131-2	361-2	138-4	257-2
3.40	267-2	223-2	451-2	197-4	413-2	169-2	391-2	149-4	312-2	149-2	360-2	133-4	276-2	129-2	340-2	121-4	239-2
3.60	415-2	247-2	433-2	195-4	431-2	174-2	371-2	137-4	304-2	144-2	347-2	114-4	252-2	130-2	320-2	107-4	227-2
3.80	288-2	248-2	424-2	175-4	410-2	172-2	357-2	122-4	285-2	148-2	355-2	105-4	245-2	139-2	331-2	103-4	230-2
4.00	558-2	358-2	563-2	229-4	563-2	208-2	422-2	133-4	327-2	175-2	390-2	112-4	276-2	154-2	352-2	103-4	242-2
4.20	456-2	336-2	573-2	195-4	503-2	260-2	504-2	151-4	390-2	210-2	441-2	122-4	314-2	169-2	372-2	104-4	254-2
4.40	427-2	423-2	659-2	223-4	604-2	328-2	557-2	173-4	469-2	243-2	463-2	130-4	348-2	178-2	376-2	100-4	254-2
4.60	608-2	475-2	657-2	229-4	649-2	331-2	513-2	160-4	453-2	240-2	431-2	117-4	329-2	176-2	355-2	901-5	240-2
4.80	558-2	436-2	650-2	193-4	571-2	334-2	519-2	148-4	438-2	253-2	427-2	113-4	331-2	180-2	343-2	819-5	236-2
5.00	407-2	388-2	554-2	159-4	488-2	300-2	486-2	123-4	378-2	244-2	411-2	101-4	307-2	186-2	336-2	811-5	234-2
5.50	312-2	303-2	462-2	102-4	347-2	268-2	413-2	909-5	306-2	226-2	386-2	785-5	259-2	179-2	354-2	655-5	205-2
6.00	153-2	238-2	436-2	678-5	250-2	210-2	400-2	601-5	220-2	185-2	375-2	545-5	194-2	164-2	350-2	546-5	171-2
6.50	114-2	209-2	390-2	506-5	202-2	189-2	381-2	460-5	182-2	175-2	368-2	441-5	170-2	161-2	349-2	468-5	156-2
7.00	280-2	312-2	399-2	652-5	280-2	191-2	390-2	399-5	171-2	165-2	378-2	359-5	148-2	155-2	360-2	397-5	139-2
7.50	173-2	295-2	401-2	537-5	247-2	197-2	393-2	361-5	165-2	164-2	383-2	317-5	137-2	145-2	366-2	336-5	121-2
8.00	198-2	253-2	399-2	404-5	198-2	191-2	392-2	307-5	150-2	167-2	383-2	282-5	131-2	148-2	369-2	299-5	116-2

DAMPING = 0 PER CENT DAMPING = 2 PER CENT DAMPING = 5 PER CENT DAMPING = 10 PER CENT DAMPING = 20 PER CENT

California Institute of Technology
Earthquake Engineering Research Laboratory

The following reports of the Earthquake Engineering Research Laboratory from 1970 on can be obtained from the National Technical Information Service, Springfield, Virginia 22151:

EERL 70-20	Strong-Motion Earthquake Accelerograms - Digitized and Plotted Data (Vol. I, Part A)	PB-187 847
EERL 70-21	" " (Vol. I, Part B)	PB-196 823
EERL 71-20	" " (Vol. I, Part C)	PB-204 364
EERL 71-21	" " (Vol. I, Part D)	PB-208 529
EERL 71-22	" " (Vol. I, Part E)	PB-209 749
EERL 71-23	" " (Vol. I, Part F)	PB-210 619
EERL 72-20	" " (Vol. I, Part G)	PB-211 357
EERL 72-21	" " (Vol. I, Part H)	PB-211 781
EERL 72-22	" " (Vol. I, Part I)	PB-213 422
EERL 72-23	" " (Vol. I, Part J)	PB-213 423
EERL 72-24	" " (Vol. I, Part K)	PB-213 424
EERL 72-25	" " (Vol. I, Part L)	PB-215 639
EERL 72-26	" " (Vol. I, Part M)	PB-220 554
EERL 72-27	" " (Vol. I, Part N)	PB-223 023
EERL 73-20	" " (Vol. I, Part O)	PB-222 417

EERL 71-50	Strong-Motion Earthquake Accelerograms - Digitized and Plotted Data: Corrected Accelerograms and Integrated Ground Velocity and Displacement Curves (Vol. II, Part A)	PB-208 283
EERL 72-50	" " (Vol. II, Part B)	PB-220 161
EERL 72-51	" " (Vol. II, Part C)	PB-220 162
EERL 72-52	" " (Vol. II, Part D)	PB-220 836
EERL 73-50	" " (Vol. II, Part E)	PB-223 024
EERL 73-51	" " (Vol. II, Part F)	PB-224 977/9AS

EERL 72-80	Analyses of Strong Motion Earthquake Accelerograms - Response Spectra (Vol. III, Part A)	PB-212 602
EERL 73-80	" " (Vol. III, Part B)	PB-221 256
EERL 73-81	" " (Vol. III, Part C)	PB-223 025
EERL 72-100	Analyses of Strong Motion Earthquake Accelerograms - Fourier Amplitude Spectra (Vol. IV, Part A)	PB-212 603
EERL 73-100	" " (Vol. IV, Part B)	PB-220 837
EERL 73-101	" " (Vol. IV, Part C)	PB-222 514
EERL 73-102	" " (Vol. IV, Part D)	PB-223 969/AS
Joint Report:	Strong-Motion Instrumental Data on the San Fernando Earthquake of February 9, 1971	PB-204 198
EERL 71-01	P. C. Jennings, <u>et al</u> , Forced Vibration of a 22-Story Steel Frame Building	PB-205 161
EERL 71-02	P. C. Jennings, ed., Engineering Features of the San Fernando Earthquake	PB-202 550
EERL 71-03	Randolph A. Adu, Response and Failure of Structures under Stationary Random Excitation	PB-205 304
EERL 71-04	Jacobo Bielak, Earthquake Response of Building-Foundation Systems	PB-205 305
EERL 71-05	M. D. Trifunac, F. E. Udawadia, A. G. Brady, High Frequency Errors and Instrument Corrections of Strong-Motion Accelerograms	PB-205 369
EERL 71-06	Knut Sverre Skattum, Dynamic Analysis of Coupled Shear Walls and Sandwich Beams	PB-205 267
EERL 71-07	John Brent Hoerner, Modal Coupling and Earthquake Response of Tall Buildings	PB-207 635
EERL 72-01	P. C. Jennings and J. Bielak, Dynamics of Building-Soil Interaction	PB-209 666
EERL 72-02	F. E. Udawadia, Investigation of Earthquake and Microtremor Ground Motions	PB-212 853
DRC 72-01	Albert W. Whitney, On Insurance Settlements Incident to the 1906 San Francisco Fire	PB-213 256

EERL 72-04	J. H. Wood, Analysis of the Earthquake Response of a Nine-Story Steel Frame Building during the San Fernando Earthquake	PB-215 823
EERL 73-01	F. E. Udvardi and M. D. Trifunac, The Fourier Transform, Response Spectra and their Relationship through the Statistics of Oscillator Response	PB-220 458
EERL 73-02	Research Papers Submitted to Fifth World Conference on Earthquake Engineering, Rome, Italy, 25-29 June 1973	PB-220 431
DRC 73-02	Earthquakes and Insurance, Published Papers on the Earthquake Research Affiliates Conference of 2-3 April 1973	PB-223 033
EERL 73-03	M. D. Trifunac and V. Lee, Routine Computer Processing of Strong-Motion Accelerograms	PB-226 047-AS